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Instructional Manual to Accompany



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LOOKING FOR MEANING

Instructional Manual to Accompany *Pixie*

Matthew Lipman Ann Margaret Sharp

UNIVERSITY PRESS OF AMERICA

LANHAM • NEW YORK • LONDON

Institute for the Advancement of Philosophy for Children



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University Press of America, TM Inc. 4720 Boston Way Lanham, MD 20706 3 Henrietta Street

London WC2E SLU England

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ISBN (Cloth): 0-8191-3829-0

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Co-published by arrangement with the Institute for the Advancement of Philosophy for Children

Designed and typeset by Universal Diversified Services, Inc. West Caldwell, N.J. 07006.



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INTRODUCTION

Pixie is a reasoning, reading and language arts program that concentrates on the sharpening of thinking skills while affording children the opportunity, through cooperative dialogical inquiry, to think philosophically about ideas that concern them.

Perhaps the initial purpose of *Pixie* is to puzzle and perplex its readers. One reason for this is that one can thereby begin by approximating as closely as possible the state of wonder and puzzlement that is generally characteristic of early childhood. After all, if education is to begin where the child is, rather than where the teacher is, what could be a better starting point?

When we say that children are perplexed, we commonly think of them as struggling to explain the world that surrounds them. But this may very well be a projection of adult puzzlement, and is influenced by scientific thinking, for children not only wonder how things are caused - they wonder as well at the very fact that things are as they are. Thus, for example, children are puzzled by family relationships, with their intricate rules and mysterious origins. Or children will be puzzled by words, and again, it is not the origin of words which concerns them so much as the interaction of words with one another and their reference to the world. Nor are children necessarily more interested in purposes than they are in causes: the child who stares at her own face in the mirror, or who stares wonderingly at her dog's face, may not so much be trying to understand how these things were caused, or what their purpose will be, but simply what they are, and that they are. Children wonder at the world. it is an awe of wonderment so profound that if it were to occur in an adult, we might call it religious.

Children wonder, and they are curious. They have an insatiable desire for reasons. When they ask questions of the form, "How can this be?" it is as if they want someone to *justify* the world to them. Indeed, there may be more than a slight connection between children's inability to tolerate a world which cannot be justified to them and their intense dislike of injustice.

The children who read *Pixie* together in the classroom will recognize Pixie's puzzlement as akin to their own and will be delighted by that recognition. They will also identify with Pixie's insistent curiosity and search for reasons. Unreasonable as Pixie often is, one discovers in her, despite many backslidings, a desire to be reasonable, and a desire that other people be reasonable too. This is again something which young readers will acknowledge as linking them affectionately to Pixie.

Adults, by means of the enormously powerful scientific apparatus at their disposal, endeavor to understand the universe, and if possible, to control it. The function of intelligence in children may not be quite so instrumental and operational in character. Children process their experience by reflecting upon it. The world they marvel at may not be one they wish to capture and control so much as one whose meanings they wish to apprehend. They are trying to make sense of what puzzles them, although they would probably not be happy if the sense were to be any less delightful than the wonder. This is why they love stories so much. Stories make sense of the world, but they do so in a delightful way. The storyteller, in order to enlighten us, does not have to kill the world first and then dissect it.

So reasoning skills are correlated with meaning acquisition. The more skillfully children draw inferences, identify relationships, distinguish, connect, evaluate, define, and question, the richer the totalities of meaning that they are able to extract from their experience. In this sense, experience is like raw ore: the more powerful the refining techniques, the more effectively the pure metals are extracted from the dross. The cultivation of reasoning skills is the most promising path we can pursue if our aim is to help children find out what it is that makes their experience significant.

Reading and Writing as Reasoning

We are all familiar with the fact that virtually all children, while still very young, learn to speak the language of their parents. This is no easy matter. They must learn pronunciation, inflection, grammatical proprieties, (such as the incredibly difficult use of personal pronouns) and to converse meaningfully and intelligently with their families. Yet, for many children, to read the language they speak so readily is a formidable chore, and to write it is still more formidable. The child who loves to have a story told to him over and over again may nevertheless balk at reading it for himself, and children who read voraciously may be just the ones who freeze up when it comes to writing.

We tend to overlook, when we try to teach children to read, how mechanical are our techniques, such as those which stress grammar and phonics, and how close these techniques are to what actually blocks the children from reading. Moreover, we seldom seem to be aware of the intimate relationship between reading, conversation, and writing, so that our efforts to get children to write force upon them, very often, a formal style quite alien to the style in which they speak. And then we wonder why they do not read and do not write.

If, instead, reading and writing are seen as natural outgrowths of conversation, and if conversation is seen to be the child's natural mode of communication, an order of pedagogical priority very different from those that presently exist could be established, one which would be extremely valuable for the construction of an early childhood curriculum.

Ideally, what should a reading, reasoning and language arts program do in the early grades?

First, it should establish continuity between reading and conversation on one hand, and conversation and writing on the other.

Second, it should present the materials to be mastered in the form of a unified experience, on the child's own level.

Third, it should stress *meaning* rather than form, by giving precedence to the relationships that language has with the world, rather than to grammar.

Fourth, it ought to link the child's experience with the literary experience of mankind, so that the child's wonder at everyday life is found to be akin to the marvels of folklore and fairytales.

Fifth, it should stimulate thinking.

Sixth, it should help children make better use of more familiar words, particularly some of the very simple but problematical words which are of critical importance to our use of language: *if, but, and, all, no,* and *like,* rather than introduce them to a list of new words which they will rarely encounter again.

WORKING WITH THE PIXIE PROGRAM

The *Pixie* program aims at helping children develop cognitive skills in a sequenced yet cumulative fashion. Once concepts are introduced, they are promptly put into practice by means of exercises and discussion plans. Reasoning skills are developed by applying logic to matters of interest to the child.

The *Pixie* program, like the other programs in Philosophy for Children curriculum, contains a wealth of philosophical ideas which children cannot only discuss but which they can also reenact and dramatize. The sequencing of the program is primarily a matter of reading level. The reading level of *Pixie* is approximately 3.0. But there is no sequencing of philosophical ideas for different age levels. Ideas such as appearance and reality, unity

and diversity, similarity and difference, or any of hundreds of other philosophical ideas are as applicable to the young child as to the older adult.

However, we cannot assume that eight-or nine-year-old children are as ready for philosophical discussion as they will be in another year or two. But as they grow, they move towards increased in collaborative competence, logical astuteness, and mastery of language and ideas. The function of *Pixie* (and of any predecessors it may turn out to have) is to enhance that readiness, while at the same time providing an intellectual experience which will be satisfying for its own sake.

If curiosity is the disposition which children and philosophers share, then concern with the nature of similarity and difference is their common intellectual interest. Either we compare things with one another, says Plato in *The Statesman*, or we compare them with an ideal standard. The "we" here can stand indifferently for philosophers or children or, in fact, for anyone. We discover similarities and differences by making comparisons, and to make comparisons is therefore to uncover similar and different relationships. Hence, the children in *Pixie* are intent upon examining the nature of exact and inexact (or literal and figurative) comparisons, and as they do so, they find themselves investigating ratios and similes, metaphors and analogies. Indeed, if the mastery of any one skill were to be taken as characteristic of the objectives of the Pixie program, that skill would have to be analogical reasoning.

The *Pixie* program attempts to provide children with sequenced exercises which will give them practice in the making of comparisons both of "things" rather than "terms" and of relationships. Some children are prolific when it comes to producing fanciful or even extravagant associations; others are timid or inhibited. Nevertheless, the objective for all groups must be a craftsman-like competence in perceiving and expressing similarities and differences; those who use language with an exuberant flair for figurative expression will always feel free to go beyond such competence, while those who have been virtually inarticulate will find that practice in the making of comparisons suddenly opens new vistas in the description and explanation of the world around them.

Early childhood is a period in which language is being acquired at an incredibly rapid rate. We are inclined to take an indulgent view towards vocabulary expansion, even where it represents the acquisition of increasingly exotic terms by children whose proficiency in the use of such unglamorous terms as "all," "only," "because," "same," and "different" is uncertain and unsteady. This indulgence in novelty can be shortsighted and unwise: unless one has a firm command of the basic operations of a

language, the addition of new terminology is more likely to aggravate the problem than to alleviate it. Yet the problem is not one that can be resolved by a brisk review of grammar, for the problems the child faces in learning to use language are substantive as well as formal, philosophical as well as syntactical, and practical as well as logical. When the child's syntactic, semantic, and pragmatic awarenesses are keeping pace with one another, vocabulary growth will present no significant problem.

Ambiguity

Learning a new word is not more important, in and of itself, than learning that a familiar word has not just one but a variety of meanings and can have several such meanings in a given context. When children learn about language, people, and the world in general, there is a danger that they will acquire a severely over-simplified view of these matters. They may assume, for example, that people always mean what they say and that things are always what they appear to be. The naive trust of the child in a just and benevolent order must sooner or later come to grief, as the child attempts to impose a grid of orderly understanding upon a world that is many-leveled, turbulent in its alterations, and frequently absurd. Therefore, equipping children with an understanding of ambiguity is a valuable preparatory discipline which readies the child not only for the puns, equivocations, and double-entendres of everyday discourse, but also for the rich allusiveness of literature, the double-binds of human relations, and the covertness of nature itself.

Moreover, while learning about ambiguity prepares children to deal with the duplicity that frequently characterizes the world around us, it also helps children discover the relationships of words with words, things with things, and words with things. As we encounter the world, terms and things are manifest and explicit, while relationships seem to be much more implicit and latent. We perceive the mountain and the valley, as well as the words "mountain" and "valley," but we are slower to realize the relationship which the mountain and the valley have to one another, the referential relationships between the terms and their objects, or the fact that the words themselves are related to one another.

Relationships

It is when we contrast and compare that we discover relationships: faster than, busier than, equal to, later than. We also discover familial connections: mother of, cousin of, grandfather of. Likewise, we find that there are important linguistic relationships: the way some verbs "take objects" and others don't, the way nouns may be modified by adjectives and verbs by adverbs. Out of this potpourri emerges the astonishing and monumental fact of *resemblance*: of words with one another, of people with one another, of things and events with one another, of words with people and with things. These resemblances we express by means of literal comparisons, and by figurative means as well, e.g., similes, metaphors, and analogies.

In the above account, liberties have been taken with the order of events, for surely small children have a very lively sense of resemblances. They perceive the world physiognomically by analogy of human characteristics with nonhuman ones. The cup lying on its side is perceived as a "poor, tired cup," and the numeral 10 is perceived as "daddy and mommy." We labor heroically to convince such children that these are "category-mistakes," and that things should be compared with things, numbers with numbers, and people with people. Gradually, we succeed in bringing a degree of order into their expressions by making them see that the everyday world calls for businesslike, matter-of-fact literalness, while only the world of literary expression can accommodate their physiognomic experiences and their figurative ways of expressing such experiences. The child's imaginative response to an animate world is replaced by an armory of conventional reflex responses to a prosaic world. Children have none of the elements of deliberate artifice which are invested in adult experience. However, adults must strive for the expression of the creativity they naturally had as children.

In other words, cognitive development is, in one respect, a sorting out of contexts: we learn not to confuse the spatial and the temporal, the auditory and the visual, the physical and the personal. The very young child, having yet to learn the boundaries of these contexts, finds no difficulty in transcending them and perceives houses as having faces, furniture as cheerful or menacing, colors as happy or sad, and shapes as awkward or graceful. Three and four year olds produce metaphors at a breathtaking rate, but so many of these metaphors appear to us to be recklessly inappropriate that we take prompt steps to strengthen the child's critical abilities. As a result, the child may go to the other extreme, where contexts and orders have been clearly sorted out and random crossovers are prohibited. Therefore, the educational process must accept responsibility for the literal-mindedness of so many of the children shaped by that process.

Awareness of ambiguity, then, is the opening wedge of the struggle to establish a dynamic balance between the child's ability to function figuratively as well as literally. In a sense, simile is the inverse of ambiguity. An ambiguous word can have several distinct meanings in a particular context, whereas a simile suggests that two different things have a definite resemblance. So ambiguity sees difference in similarity, and simile sees similarity in difference.

Simile

In simile, comparison is explicit (whether one says "X is like Y," or "X is as as Y.") In metaphor, however, comparison is suppressed. In metaphor, one wishes to call attention not to a resemblance between two things normally taken to be different but to the identity of those two different things. To say "George was angry" is clinical and remote, for it merely tells us that George was a member of the class of angry beings. "George's face was like a thundercloud" has more emotional effect, although it still involves us in the making of a conscious comparison. "George's face was a thundercloud" is still more dramatic because it eliminates the comparison and speaks of the two radically different things as if they were one. Writers accustomed to using figurative language find literal statements like "George was angry" pale and anemic. Writers accustomed to using literal language find metaphors to be examples of linguistic overkill. However, both forms of expression have their purposes, and it is only when used for the wrong purpose that either mode of expression may be found inappropriate.

A simile is a claim that two things normally taken to be different are in some respect similar; an analogy is a claim that two relationships are alike. Such, at least, is the minimal analogy, taking as it does the form A is to B as C is to D. Notice that analogies, like similes, involve likeness or similarity. Just as similes become radically dramatized when the similarity claim is replaced by an identity claim and they become metaphors, so analogies can take the form A:B \approx C:D, where the relationships being compared are ratios and the alleged comparison is in fact a statement of equivalence. But the equivalence relationship is anything but dramatic: 3:6 \approx 12:24 is simply a tautology, another way of saying $\frac{1}{2} = \frac{1}{2}$.

Not that small children—even those who are only three or four years of age—need to be counselled by us on the creation of similes and metaphors: Their fertility in these matters is far greater than that of adults. What they lack, however, is the critical sense which would enable them to judge the appropriateness or the inappropriateness of the figures of speech they can so elaborately construct. The strengthening of that critical sense can in turn

help them become aware of whether their own analogical reasonings are being done well or badly.

Analogies

Many thinkers have seen analogy as the mode of reasoning which is shared by creative persons in all fields. When we express ourselves with a simile, it is because we have noted a resemblance between two *things* that in most other respects are different. When we express ourselves by means of an analogy, it is because we have discerned a resemblance between two *relationships* (or between two whole systems of relationships). Whether a sense of proportion is what makes for the ability to formulate analogies, or whether the ability to formulate analogies is what makes for a sense of proportion is very difficult to say: perhaps each ministers to the other. But it would certainly appear that the early strengthening of so fundamental a skill as analogical reasoning would be a sensible strategy for both cognitive and creative development.

Analogies are often much more complicated than they appear in their minimal formulations (e.g., Cats are to kittens as dogs are to puppies.), for they may involve entire systems or constellations of relationships being compared with one another. Someone who remarks that "the rulers of present-day Argentina run their country much like the rulers of ancient Sparta ran theirs" is drawing a complex analogy between two whole systems of government. The irony in the critic's remark that "there was considerable analogy between the way the Schubert songs were written and the way they were sung in the concert last night" is the inference that there should have been a unity between the score and the performance, not a mere similarity.

In a striking figure of speech, the physicist Murray Gell-Mann once remarked that our inquiries into nature are so successful because "nature resembles itself." However that may be, it would appear that scientists search for resemblances among differences and for uniformity within diversity. Whether such uniformity is genuine and substantive or simply methodological and conceptual, is a matter about which debate continues. But whenever inductive reasoning takes place, some degree of analogical reasoning is probably also involved. On another hand, the use of analogy in artistic construction is of primary importance. Perhaps the best example would be the theme and variations approach used in music, painting, architecture, and probably, to varying degrees, in every form of art. The enjoyment of the listener or beholder is often proportionate to his ability to educe the analogies that have been produced by varying the elements but

retaining the relationships under comparison or by varying both elements and relationships, while retaining barely recognizable resemblances among the different structures. Indeed, appreciation is a form of inquiry in the sense that it compels wonder and thinking, with analogical reasoning very prominent among the forms of thinking involved.

Rule and Reason

Reasons are introduced because they are what we offer when we are trying to *justify* what we do. Whether or not the reason offered does justify the act in question is what makes it a good or poor reason respectively. Whether an excuse is a sufficient reason or a poor reason is something Pixie is inclined to puzzle over and to leave pretty much in doubt.

There is good reason to note the concept of rule at this stage of children's cognitive development. Harry Stottlemeier will commence his odyssey with the discovery of a rule, and presumably, he has some idea of what he is discovering when he calls it a rule. Nevertheless, it would be well to mention here that, in teaching thinking skills, one does not necessarily begin by teaching rules, axioms, and definitions from which the remainder of the subject is to be inferred by rigorous deduction. Particularly when dealing with children, a holistic approach is more appropriate. The students must discover some generalization which will permit them to judge any particular instance of a given problem. This method is undeniably less precise and less reliable than procedure governed by rules, but it has other advantages. It is quick, and it is not mechanical. It trains judgment and facilitates comprehension.

The holistic approach has governed much of the construction of exercises in the instructional manual to accompany *Pixie*. It is assumed that it is more profitable, in working with eight- or nine-year-old children, to ask them whether a particular instance of dialogue represents good or poor reasoning than to ask them to learn and then identify the violations of logic which they find. Eventually, the children may be taught the rules which apply to such cases and whose use gives greater protection against error than the more "intuitive" holistic approach does. The holistic approach, on the other hand, permits the student to respond to minute cues or subtle nuances which would escape a mechanical application of the rules. The rules of logic screen out gross violations, but they do not exclude a vast number of linguistic inflections which would be considered improper reasoning in an informal sense. All the more reason, then, to sensitize children first to the look and feel of illogic and to habituate them to search techniques that raise questions of appropriateness, proportion, and analogical

fitness. Later they may learn more formal techniques for detecting invalid reasoning. At the same time, to make the transition to the "formal stage" more gradual, there is nothing wrong with introducing *some* exercises which call for the use of logical rules.

The holistic approach invites us to respond to the *gestalt* of a context. Gestalt can be thought of as a system of relationships. The study of relationships that Pixie and her friends engage in during the first six chapters of the book culminates in the analysis and composition of relational structures. The analysis is particularly evident in the discovery of the distinction between classes and families; the composition is evident in the construction of stories and playlets.

The distinction between classes and families may be expressed rather roughly by saying that classes are collections of individuals having some feature in common, e.g., the class of people over five feet tall, while families are collections of individuals who are related to one another in a structured fashion. An example of a family might be a kinship system, a collection of games, or the "family" of nations. Needless to say, the two types of collections are not mutually exclusive, and members of the same family can also be members of the same class.

Story

We would be remiss if we did not mention the central role in Pixie of the notion of a story, the way in which stories exemplify the problematical borderline between "truth" and "make-believe," and the enormous importance of story construction for the development of cognitive skills in organizing ideas, sequencing, dramatizing, implying, harnessing imagination, and struggling for consistency and coherence. But Pixie contains an added level of complexity, for it raises the question of the relationship between a story and the story of the creation of that story: In short, it raises questions of the sort commonly found in the sociology of literature. At the same time, by introducing the notion of versions and interpretations, students begin to discover how cultural traditions are formed and how works of art are passed down from generation to generation. Finally, by failing ultimately to reveal Pixie's story, the book encourages children to venture into hermeneutics, for they are led to conjecture as to what Pixie's story might have been, based upon the alternative versions of it to which they have been exposed. They might begin to recognize the rich and delicate relationship between the texts that have inspired human beings throughout history and the efforts of historians and others to reconstruct those texts, where they have been lost, or to authenticate them, where they have been preserved.

Mystery

Another motif that runs through *Pixie* is that of mystery. In this context, *mystery* is not another name for a detective story. Rather, it is mystery in the sense of coming up against something for which no explanation seems possible. William James gives the example of what happens when we look at ourselves in a mirror and ask ourselves how *this particular thing* could ever have come about. In this sense, each of us is a mystery, for it is not clear at all how we have come to be the persons we are. Equally mysterious are such matters as whether the world will ever come to an end and if so, how. Nor can we ignore Pixie's final taunt: "How do we know anything?" Thinking is a prime mystery, and knowing is one of thinking's most mysterious facets. As Pixie proceeds to mask and unmask herself, we see that she, too, is a mystery creature, especially insofar as she exemplifies mind or psyche.

Myth

It is no accident that the final two chapters of *Pixie* deal with—or touch upon—some of the myths that one would encounter in reading Empedocles or Lucretius or the *Symposium* and the *Parmenides* of Plato. (Children find themselves quite at home in the world of myth and are able to entertain mythic possibilities without troubling themselves as to whether these are actualities in which they are expected to believe). If we want children to take history seriously, we have to find ways of preparing them to reenact it. The dramatic staging and presentation of myths give children opportunities to generate new dramatizations, new interpretations, and new mythological possibilities. If *Pixie* does not liberate children's *narrative* dispositions, if reading Pixie's story of her story does not result in a burst of storytelling in the classroom and in increased commitment to the creative (and not merely to the appreciative) aspects of literature, *Pixie* will have failed in its purpose.

Pedagogical Objectives

In working with the Pixie program, it would be well to keep certain pedagogical objectives in mind:

(1) Despite the variety of philosophical exercises in this manual, there are never enough exercises specifically designed to encourage children to

write. It would therefore be profitable to consult *Writing How and Why: The Manual to Accompany Suki* and adapt some of the simpler writing exercises to this program. Also this is a welcome opportunity for you to create your own exercises, as well as to invite ideas for exercises from the members of your class. Avoid exercises on book reports or other accounts which combine the task of being factually accurate with the problem of dealing with the mechanical and stylistic aspects of writing. Although all of these things are going to have to be mastered, they should be sequenced.

- (2) You may find your pupils very receptive to the assignments of choosing their own mystery creatures and devising their own mystery stories. This is especially valuable because it enables the novel to serve as a model for the children in the classroom.
- (3) By the time you arrive at chapter 10, your students should have internalized a great deal of the dialogical method of the course. Indeed, they will have observed you in the role of moderator so carefully that they will be able to substitute for you in directing and carrying on conversations among themselves. Thus, there are two stages in your own role as teacher in this program: (a) During the first stage, you should be pedagogically sure of vourself and in control of the relevance of the discussion to the issues at hand. At the same time, you should be philosophically selfeffacing, so that your own personal views do not tend to outweigh the views of the children. (b) As the year progresses, your example of the role of pedagogical director will gradually begin to bear fruit. You will find it possible to be increasingly self-effacing in this pedagogical sense so as to afford members of the class the opportunity stated above, that of assuming the role of teacher during certain class sessions. No doubt you can be very proud if, by the end of the year, your students should put on a puppet performance of Pixie. However, you could be doubly proud if, by the end of the year, your students could put together a story of their own invention, discuss it without adult intervention, and then create settings, costumes, and other aspects of staging which would enable them to present a live performance of their own creation. Nothing would better manifest their internalization of the methodology of Philosophy for Children.

A word about the blank pages or portions of pages in *Pixie*. These are for your students to try their hand at illustrating the book. But if the book is to last for several groups of children, then you should restrict your students to illustrating just a few of the empty spaces. The contributions from different children in different classes will make for a new and different sense of community.

Suggestions for Using the Pixie Manual

The younger the children with which you work, the more clear you should be about the pedagogical approach that you are going to use, and the more firm you should appear with regard to this methodology. The children should be able to sense very readily that you know what you are doing. This is not to suggest that you have the "answers," but that you have mastered the pedagogy to be used in each class session.

When we talk about pedagogy, we mean the teaching procedures you are to utilize: what you do first and how you follow it up, how you organize each class session, how you facilitate the discussions, how you integrate exercises with the materials in the text, how you make use of supplementary activities (drama, dance, music, poetry, children's stories) to reenforce a concept. With students in early childhood, you need to be ever so tentative with regard to philosophical viewpoints because younger children are so impressionable and so apt to assume any intellectual stance you take as the absolute truth. In other words, the risk you run of indoctrinating children with your own opinions is greater in early childhood than at any other time.

Philosophy begins in wonder and these children are beginners; therefore, what you should be doing is helping them wonder. If you provide them with answers, even those you happen to believe, you cut off inquiry, you cut off wondering, you terminate discussion, and you foil the purposes of the course. But providing answers has nothing to do with having a strong pedagogy. And this is why we provide the suggestions that follow.

• Research in cognitive psychology has clearly indicated that materials presented in a narrative context such as a story are more apt to be remembered by students than materials which are organized merely in a logical fashion as in a textbook. For this reason we urge that you never stray too far from the story context when you teach *Pixie*. The best way to do this is to begin each class session by having the children read an episode aloud. You can do this in a variety of ways. Some days they may read a paragraph a piece, and some days they can script read. The latter is the more sophisticated procedure. In the beginning they might find it difficult, as they have to learn how to scan a sentence quickly, leave out the "he said" and "she said" and read with expression. But with practice, they get better and better.

- Immediately following the reading, ask your students for their reactions to what they have just read. Notice that you are looking for their reactions and not yours: the moment they sense that you're interposing your interpretation they will pull back and hesitate to offer their own views. Furthermore, do not demand too much from them at any one moment. (a) Do not take up more than one page at a time, and (b) instead of asking them about the ideas on the page (a demand which may require a greater jump than they are ready to make, especially in the beginning of the course), ask what they see on the page that interests them. Each comment from the class should be written on the board as faithfully as possible. (The moment they recognize that you are rewriting their comments in your own words, they will suspect that you are manipulating their thoughts.) Since one of your aims is to encourage children to be proud of their contributions to the discussions, you might want to identify each contribution by adding the name of the contributor.
- At this point you have a number of options: you can postpone discussion of any contribution until all suggestions for that page are on the board; or you can encourage discussion of each contribution as it is suggested. Or finally, you could discuss each item briefly upon its being offered but reserve more extended discussion for later in the class period. A brief discussion might emerge through questions such as: "Why do you find that interesting?" or "What do you think those words mean?" or "What do you think Pixie means by that?" or "Why do you think that happened?"
- Since one of your aims is to help children listen and talk to one another, you might ask if they see any similarities or differences on the board. Or you might go back to an individual contribution and ask the child to look again at the relevant line on the page and ask "What's the problem here?" Here your objective is to invite different interpretations for a given text in the hope that this will foster dialogue among the children.

Now, why foster dialogue? To a child, dialogue is a game like skipping rope, or playing hopscotch, or playing "kick the can." If you enter the game you find yourself in situations which challenged and compel you to develop skills which enable you to be competent in that game. The skills that reveal competence in dialogue are reasoning skills. Therefore, dialogue among the children enables you to foster the mastering of reasoning skills without drill, without compulsion. The spontaneous, game-like character of dialogue among children makes

- participation enjoyable and self-rewarding. It is not something that one does in order to satisfy the teacher, or for any other extrinsic reward.
- Some of the ways you can foster dialogue are as follows: (a) When a question of definition comes up, (and, if it doesn't come up you might want to introduce it,) it should be recognized that the definitions offered by each student need not be the end of the discussion. Instead, each definition represents an opportunity for a challenge to that definition: "Is that always true?" "Are they all like that?" Suppose the word at issue is "fairy tale." You could ask "What is a fairy tale?" and the student may say, "It is a story." Here your path is clear; you have to ask, "What kind of story?" If the answer given is: "a make-believe story," that might be sufficient. However, you can still ask "Can anyone think of a make-believe story that isn't a fairy tale?" If you get no takers, you might let the matter drop. But if your students pursue the discussion, it could be very worthwhile. (b) If differing opinions among the children are evident, take advantage of it: "I think Cindy is saying one thing and Charlie another. Cindy, tell Charlie why you think you are right." (c) You still could ask, "Are all fairy tales make-believe stories?" Someone may say that a fairy tale could be true. In this case, you would have another potential controversy on your hands: "Can a fairy tale be true?" and further, "What do we mean by true?"

What the teacher needs throughout these kinds of discussion is a firm sense of what is entailed in an acceptable definition, and what is problematic about words (such as "true") which we normally take for granted.

• Leading a philosophical discussion in the way just outlined is not easy. It takes time to become adept at learning how to follow up children's remarks with the right kind of question. It is for this reason that a number of exercises are provided to help you develop this skill. They are designed deliberately (a) to foster dialogue; (b) to open up the problematic aspects of certain ideas, concepts or themes for examination; (c) to elicit differing interpretations; (d) to afford practice in employing philosophical techniques; (e) to explore the implications of what each person contributes to the discussion; and (f) to consider what is involved in a given problem proposed by the novel.

Thus, the exercises are a bridge for the teacher connecting the ideas in the novel with philosophical discussions among children, *provided that* both the teacher and the students come to internalize the logical moves and philosophical strategies that are embodied in the exercises and discussion plans. If the children were to conclude that the questions were "teacher's questions" or "cookbook questions" for a set course rather than *models* of the kinds of thinking they themselves are expected eventually to engage in on a routine daily basis, the goal of the course will not be attained.

One can learn to ride a bicycle only by riding it. Likewise, the Pixie program assumes that one can learn to philosophize, to master thinking skills, only by practice—not by any teacher talking about it. It is the exercises that provide the means for the children to engage in the activity daily, and to come to the point where the methodology has been so internalized that they can do it habitually.

The exercises are not ends-in-themselves. They are there to help teachers and students alike master certain skills. They should not be resorted to at the expense of student dialogue, but should be used to help students clarify what they themselves have chosen to talk about after they have read a section from the novel.

This puts a tremendous burden on the new teacher. On the one hand, it is very useful to have certain exercises and discussion plans prepared beforehand, even to have a copy for each student. But, if the conversation takes off in another vein, the teacher has got to be flexible enough—and to know the repertoire of exercises sufficiently—so that he or she can follow the conversation where it leads with another exercise that is appropriate. This flexibility usually comes only with time, experience, and a creative use of the instructional manual.

CHAPTER ONE

Episode 1

(p. 1)

Pixie's name

In the folklore of southwestern Britain there are various mythological beings which form a class of fairies or sprites, and which are also sometimes called pixies or piskies. Pixies were apparently the more elfish or mischievous of these creatures. It is possible that the word *pixie* or *piskie* is related to *psyche*, the Greek word for the human mind or spirit.

Pixie's conduct

This. first episode introduces us to Pixie not as a physical creature but in terms of some of her mannerisms and behavioral characteristics. She's impatient with other people, she's a tease, she mimics, she lectures to other people, she makes blunders unknowingly, and yet she seems to have a certain degree of self-knowledge and self-insight. She expresses some of these traits obliquely in some cases and directly in others. Her impatience is apparent in the emphatic way she describes how long she has had to wait for her turn. It is obvious that she's a tease, because she says her name is Pixie but then refuses to reveal her real name. She also refuses to tell her age. Instead she resorts to the devious maneuver of "the same age you are." She mimics her teachers when she relates how she would have talked last year. She lectures when she tells her audience which acrobatic positions they can get into and which they cannot. She also blunders when, in the course of explaining what she seems to be made of, she offers the opinion that vinegar probably resembles ice cream. Her self-knowledge is revealed when she recognizes that she is more patient now than she was a year ago.

Pixie's philosophical disposition

Pixie has a hard time saying anything without raising issues of considerable philosophical value. Re-examine the episode, looking not so much at the quirks of Pixie's behavior as at the underlying philosophical issues raised by her discourse about naming, what is possible, what things are made of, what is real, or what one's capabilities are.

What is a person's real name?

To begin with, there is the question of her name, that is, the difference between the name her parents gave her (her "real" name) and the name she gave herself. One can't help wondering why one name is called "real" and the other is not, unless she means that the name her parents gave her is her legal name, which is a curious way of defining the word real.

Comparing ages

Equally interesting is her answer when asked how old she is. She tells us, the readers, that she is the same age we are. How is that possible, if we are all of different ages? One interpretation of her answer is that age is irrelevant on the level at which Pixie is addressing the audience. In this sense, philosophy itself knows no age differences. (It may be added that this is the first instance in the book of an exact comparison.)

Either-or

Even when Pixie tells us that we can't cross our legs and put them around our necks at the same time, she employs the principle of logical exclusion (one or the other but not both) to convey a physical impossibility.

Analogy

The remark that Pixie acts as though she was made of vinegar is the book's first example of an analogy. It is not an analogy formulated as precisely as will be the case in a later chapter. One might say that Pixie acts the way things made of vinegar act, but this is far from satisfactory. What does Pixie's mother mean? Surely she is trying to express, through the resemblance she cites, something of Pixie's sour disposition.

Reflexiveness

It should also be mentioned that Pixie is very much concerned with the image she presents to others and with her own understanding of herself. In other words, Pixie is reflective not only about the world but about herself as well and about her own reflection. In this fashion Pixie exemplifies what is involved when one seeks to obey one of the most ancient of philosophical injunctions, "know thyself."

Stories and story-telling

Finally, this episode informs the reader that *Pixie* is not only a novel but it is a novel about story-telling itself. It is concerned with the very notion of what a story is. In a sense, the difference between a story and story-telling is comparable to the difference between writing music and performing it. Stories can be performed orally but not written, or written and then performed orally. The Homeric epics were not written but recited. Many modern pieces of literature are designed only to be read silently and are never read aloud. From a pedagogical point of view, the understanding of what a story requires in order to be composed and told successfully is extremely valuable. To produce a consistent and coherent narrative requires more organizational skills than any other form of classroom exercise.

Making up stories

As your students become conscious of what is involved in the telling of stories, you should be prepared to exploit their consciousness by having them invent stories at every possible opportunity. If, for example, you overhear a student's comment that sounds inventive, suggest that the student elaborate on the comment and turn it into a story. The best beginning exercises will not be your themes but amplifications of the student's own insights into his experience put into story form. Encourage them to select from among their own insights and verbalizations those expressions they are proud of as the basis of further storytelling. For example, if a student comes up with an interesting simile or metaphor, discuss it with the student. It could be the start of a most imaginative bit of description or narration.

DISCUSSION PLAN: Stories

(p. 1, line 2, 22)

- 1. How do make-believe stories usually begin?
- 2. What does "Once upon a time...." mean?
- 3. Do all stories have a beginning?
- 4. Do all stories have an ending?
- 5. Do all stories have a middle?
- 6. Could a story have an end and a middle, but not a beginning?
- 7. Could a story have a beginning and an end, but not a middle?
- 8. Are all stories true or are some true and some make-believe?
- 9. How do you tell the difference between true stories and made-up stories?
- 10. Are some stories good and some not so good?
- 11. How do you tell the difference between good stories and stories that aren't good?
- 12. Can a story be true, and still be good?
- 13. Are all stories about what happens to people?
- 14. Can there be stories about people dreaming?
- 15. Can there be stories about people thinning?

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DISCUSSION PLAN: Names

(p. 1, lines 3-5)

- 1. Do you have more than one name? Explain.
- 2. Do your parents call you by the same name as your friends call you?
- 3. Do you use your name when you talk to yourself?
- 4. If you didn't have a name, would it matter to you?
- 5. If you had a different name, would it matter to you?
- 6. If you had a different name, would you be a different person?
- 7. Can you think of a name you would rather have than the one you have?
- 8. If people wanted to, could they re-name everything in the world?
- 9. Can people's names be bought and sold?
- 10. Is it possible that, as people grow older, they get to look more and more like their names?

(p. 1, line 10)

EXERCISE: What is real, and what only seems to be real?

(p. 1, line 4)

Prepare cards for four different desks or tables. This is what the cards read:

- 1. Things that seem to be real, but aren't.
- 2. Things that seem to be real, and are.
- 3. Things that don't seem to be real, but are real.
- 4. Things that don't seem to be real, and are not.

Now, each person is to bring an item to class and put it on one of the tables. Here are some suggestions:

- a. an artificial flower.
- b. a toy automobile.
- c. a book of fairy-tales.
- d. a coke bottle filled with water.
- e. a potato carved in the shape of a cat.
- f. a paper airplane.
- g. a photograph of a member of the class.
- h. a small mirror.

Go around the room, and each person, in turn, must challenge someone else to give the reason for putting that person's object on that particular table.

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		Things that can be thought and also can happen	Things that can't be thought, but can happen	Things that can't be thought, and can't happen	Things that can be thought, but can't happen
1.	a circle with corners				
2.	a mountain that is half on the earth and half on the moon				
3.	a person who becomes the same age as whoever he talks to				
4.	a loaf of bread that stays the same size no matter how many slices are cut from it				
5.	two numbers that are equal to each other and not equal at the same time				
6.	a machine that produces sounds that can be heard everywhere in the universe				
7.	tomorrow and yesterday turn out to be the same day				
8.	someone is taller than you and shorter than you at the same time				
9.	a mouse that can swallow an elephant				
10.	a river that runs uphill				

EXERCISE: What can happen and what can't happen?

EXERCISE: Similes and exact comparisons

(p. 1, lines 13-14)

A simile states a similarity or resemblance, not an exact comparison, between two different things. Someone may say, "Her face was like a star," and it can be assumed that the brightness of her face is being compared to the brightness of a star. But of course, it is only a resemblance, not an exact comparison.

But if it is said that "Mary is as tall as John," or that "Mary paid as much as John to get into the movie," we are dealing with exact comparisons, not with similes.

In the following cases, state whether the expression is a simile or an exact comparison:

- 1. Hank is as old as his twin brother, Frank.
- 2. Lucy said, "I tell you, driving is as safe as flying."
- 3. In the firelight, her brown hair glowed like the sun.
- 4. Jimmy is tall and skinny, like a stringbean.
- 5. The unripe tomato was as firm as a rock.
- 6. The ocean was as cold as ice.
- 7. "I swung on the swing until I was as high as a kite," said Jessie.
- 8. Joan said, "Nothing tastes as good as milk when you're thirsty."
- 9. As they passed the cemetery, the two children were as jumpy as cats.
- 10. A straight line is as short a distance as you'll find between two points.

ML

EXERCISE: Conventional comparisons

(p. 1, lines 13-15)

We usually make use of conventional or idiomatic comparisons when we can't think of anything original to say. For example, "free as a bird," "high as a kite," "fast as the wind," "tough as nails," and so on.

What conventional comparisons can you think of for each of the following words:

- 1. strong as
- 6. bright as
- 11. dumb as a

- 2. busy as
- 7. stubborn as
- 12. pretty as a 13. cool as a

- patient as
 mad as
- 8. heavy as9. weak as
- 14. sure-footed as a

- 5. quick as
- 10. light as
- 15. quiet as a

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DISCUSSION PLAN: Growth and developing abilities (p. 1, lines 17-21)

- 1. Can you feel that you are growing, or do you only know it?
- 2. Are there things you can do this year that you couldn't do last year?
- 3. Are there things you did last year that you no longer want to do this year?
- 4. Are there things you'll be able to do next year that you can't do this year?
- 5. When you stop getting bigger, does that mean you've stopped growing?
- 6. Does growth mean being able to do more things?
- 7. Does growth mean being able to do bigger things?
- 8. Does growth mean being able to do better things?
- 9. Does growth mean being able to do better things in better ways?
- 10. Does growth mean changing into the sort of person you'd like to be?

Episode 2

(pp. 2-3)

Discovery and invention

Harry Stottlemeier's Discovery deals with discovery and Pixie with invention. In the invention of stories, one discovers the world. When one invents an electric light bulb or an airplane, one does so by making use of principles of nature that prevail in the real world. But when one invents or creates a story, one, in a sense, creates at the same time another whole world in which that story takes place. Discovery can be thought of at one end of a continuum, with creation at the other end. Invention is somewhere in the middle.

Fiction and truth

Pixie does not use the words "invent" or "create." She talks of stories being made up. What does the phrase "made-up" mean? In one sense it suggests something fabricated. In another sense it suggests something not only imaginary but perhaps downright false. However, there is a serious question as to whether the terms "true" and "false," as commonly understood, apply to the world of fiction. This issue recurs throughout *Pixie* just as the problem of defining "true" recurs in later novels.

Things and their history

Essentially, to ask about a thing is in a sense to ask about the history of that thing. One can look at a clay bowl and see it just as a finished object, or one can see the bowl from its beginnings as a mass of wet clay at the potters, which is shaped on the wheel, then glazed and baked in the oven, sold in a store, and finally brought home, where it might serve as a particular child's cereal bowl. This historical dimension, when explored narratively, adds a dramatic dimension to the piece of pottery without departing from the literal truth. On the other hand, one can view a piece of pottery in a figurative sense. One can see it, as for example, Omar Khayyam saw it as a metaphor for a human being. Thus, the misshapen vessel, "leaning all awry," asks sarcastically, "What, then, did the Hand of the Potter shake?" You might want to find this passage in the Rubaiyat and ask your students to interpret it. Or, give your class an assignment to write about any object they like as long as they tell the history of that thing. Be sure to commend

Distinguishing what happened from how it happened

Pixie says at the top of page 2,

"The reason I made up a story is that everyone in the class had to make up a story. What I want to tell you now is the story of how my story got made up. First there's the story, and then there's the story of how it happened. What I mean is, first it had to happen, and then afterwards came the story. So this is the story of what came first. It's the story of how it happened."

At first sight this is a very confusing paragraph. Apparently what Pixie is trying to say is that we should not confuse what actually happened with the story of what happened. (Just as we should not confuse the bowl with the various events that led up to the existence of the bowl as we know it today.) Unfortunately the word story" is applied to both the sequence of developing events and also the subsequent narration of those events.

Distinguishing the past from the discipline of history

There is an analogous ambiguity from the use of the word "history," which sometimes refers to an account of what happened and at other times to what actually happened. Thus, a book about the history of Great Britain deals with history as a discipline or study, whereas "what happened in British history" refers to the British past.

Ambiguity

This ambiguity on page 2 is immediately followed by another ambiguity. Pixie says that she can make her ears wiggle and Mr. Mulligan can't. She then proceeds, in a very analytical way, to tell us about the ambiguity in her own remark. Pixie is very fastidious intellectually. She pays very close attention to the words that she uses. This particular ambiguity is what is sometimes called an *amphiboly*, that is, a sentence that is constructed in such a way as to be open to two different interpretations. Later., we will encounter a different kind of ambiguity, where a single word has a plurality of meanings several of which are plausible within the same sentence.

The understanding of multiple meanings

Ambiguity has a fundamental importance in the *Pixie* program because it exemplifies the fact that language has many different layers of meaning and that these layers may conflict with or reinforce one another in any given instance. Later, in *Harry Stottlemeier's Discovery* and in *Lisa*, students will come to see the importance of eliminating unintended meanings by getting rid of ambiguous expressions. But here in *Pixie* and later in *Suki*, they discover how valuable it is for language to be employed in all of its many-leveled richness. It is only when students begin to detect these differences and similarities among meanings that they will be capable of understanding how similes, metaphors, and analogies work. For this reason the Pixie program exposes students to repeated exercises in the use of ambiguity in the hope that immersion in such usage will result in awareness of this important aspect of the use of language.

Mental experience

Also in this episode, one finds a number of descriptions of mental experience, of specific mental acts, and of rather complex intellectual operations: thinking, having thoughts, giving reasons, forming associations and making assumptions.

Mental acts

In examining an episode in *Pixie* you may want to have your class look closely at these mental acts and reflect on what makes them different from one another. For example, when Pixie gives a *reason*, she is offering one thought as a justification for another thought. (if everyone in the class has to make up a story, and I am part of a class, then that is the reason I have to make one up, too.) Or take the forming of associations at the bottom of the page. Mr. Mulligan says that the story "can be anything a zoo makes you think of." The zoo might make a person think about almost anything. The connections among associations are usually very tenuous. Pixie thinks of Mr. Mulligan as having been around a long time, and promptly wonders if he knew Abraham Lincoln. (Another indication of the lack of accurate information many children her age have about time. For Pixie, a long time could just as easily be 50 years as 150 years.) It's a fairly free association, since one would probably not normally have thought of Mr. Mulligan and President Lincoln in the same context.

DISCUSSION PLAN: Making things up

(p. 2, line 3)

- 1. If you make up an excuse, is that a fib?
- 2. If you make up a story, is that a fib?
- 3. If you draw a picture of someone, and your picture doesn't look at all like that person, is your picture a fie?
- 4. Can there be a make-believe story about real people?
- 5. Can there be a true story about make-believe people?
- 6. Is it possible to make up a story that doesn't have any people in it at all?
- 7. Is it possible to make up a story in which nothing happens?
- 8. Would it be possible for someone to make up a story, and the story turn out to be true?
- 9. If someone tells you a make-believe story, can you disbelieve it?
- 10. If someone tells you a true story, can you disbelieve it?

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DISCUSSION PLAN: Does everything have a story of how it happened? (p. 2, line 4)

Answer the following questions:

- 1. Does your desk have a story?
- 2. Does your school building have a story?
- 3. Does your home have a story?
- 4. Does your family have a story?
- 5. Does your street have a story?
- 6. Does your town or city have a story?
- 7. Does the Statue of Liberty have a story?
- 8. Does the United States have a story?
- 9. Does the world have a story?
- 10. Can a story have a story?

If you answered yes to any of the above questions, can you tell that story?

EXERCISE: Teakettle: practice in working with ambiguities

(p. 2, lines 11-12)

When a word can mean several different things in a given sentence, we call it "ambiguous". For example, "In the mornings, before his golf game, Dr. Wilson engages in his practice."

Here are a number of words which can have a variety of meanings. No doubt you can think of a great many more.

draw	root	page	lie	place	break
solution	race	rough	post	time	save
good	state	stand	will	house	wash
right	man	account	succeed	grave	kid

A volunteer goes out of the room, and the remainder of the group chooses a word that can have several meanings. When the volunteer returns, the members of the group, in turn, offer sentences in which the mystery word could be used. But instead of using the secret word, they always use the word "teakettle."

The person whose sentence leads to the discovery of the secret word becomes the next to go out of the room.

ML

EXERCISE: Ambiguities

(p. 2, lines 11-12)

Identify the words that can have two different meanings, and say what the different meanings are:

- 1. One parent of a baby firefly says to the other: "She's bright for her age, isn't she?"
- 2. Teacher: "Who was Atlas?" Fred: "The world's first hold-up man."
- Judge: "Since you're charged with battery, I'm going to put you into a dry cell."
- 4. Dog-owner to man: "Why did you just kick my dog?" Man: "Because he's mad." Dog-owner: "That's ridiculous! He's not mad!" Man: "He isn't? That's funny–I know I'd be if someone kicked me like that!"
- 5. Police chief:"This hill is quite a location for a police station." Policeman: "Why is that, chief?" Police chief:"It overlooks the area where there's the most crime."
- 6. Newspaper editorial: "Since the birth rate has started to decline, the population has become less dense."
- 7. Professor (facing bull in a field):"Let's be reasonable about this." Bull: "Okay, I'll toss you for it."
- 8. Bert: "Don't you find it a great strain to let your moustache grow like that?"

Harry: "Only when I drink vegetable soup."

- 9. Butcher: "I don't like to scratch myself in the freezer, because there's nothing I hate more than cold cuts."
- 10. Lost boy in amusement park: "I can't find my father." Policeman: "What's he like?" Boy: "Beer."

EXERCISE: What is in a zoo?

(p. 2, lines 19-26)

When it is your turn to answer a question, tell your answer to the person on your right.

If the answer you give is "Yes," the person on your right should ask you "Why?" and you have to give a reason why. If the answer you give is "No," the person on your right should ask you "Why not?" and you have to give a reason why not.

Are the following in the zoo?

1. roller coasters

6. peanuts

2. movie houses

7. ticket sellers

3. rattlesnakes

kitchens

4. germs

9. beds

5. keepers

10. grizzly bears

ML

EXERCISE: Associations

(p. 2, lines 25-26)

Let the class divide up into two groups that form parallel lines, facing each other. These are then two teams. The first person in the first line will be answered by the first person in the second line, who will be answered by the second person in the first line, and so on.

The object of the game is to say what the preceding person's comment "makes you think of".

The first person in the first line will begin by offering a thought, such as, "I'm thinking of a porcupine," or "I'm thinking of a plate of vanilla ice cream," or "I'm thinking of home." The next person must say what the preceding remark makes him or her think of.

If you can't think of anything, you can pass. But the side which first has three passes is the side that loses.

On the second time around, when you state an association, you have to give a reason, too. For example, if the first person says, "I'm thinking of a porcupine," the next person may say, "I'm thinking of a pincushion, because a porcupine looks like a cushion with a lot of needles sticking out of it."

ML

DISCUSSION PLAN: Thinking and having thoughts

(p. 2, line 26)

- 1. Do you think all the time, or just some of the time?
- 2. Do you think while you're asleep?
- 3. Can you think without thinking of someone or something?
- 4. Do you think in words? If so, do you think in sentences?
- 5. Can you have thoughts without actually thinking?
- 6. Can you think without having thoughts?
- 7. Can you think of something, without it making you think of something else?
- 8. Can you think of more than one thought at a time?
- 9. Can a thought be divided, the way pies are divided?
- 10. Can thoughts be beautiful?
- 11. Can thoughts be beautiful, even if they are not true?
- 12. Can thoughts be beautiful, even if they are true?
- 13. Which would you rather have: lots and lots of thoughts, or just a few nice thoughts?
- 14. If your body is the same age you are, does that mean that your thoughts are the same age you are?
- 15. Can other people let you think their thoughts?

Note to the teacher: One way of handling this and similar discussion plans is to go around the room, asking one question at a time, and discussing each question in turn. Another method is to assign each person a question, give the class time to reflect, then call on individuals as they volunteer to discuss their answers.

ML

EXERCISE: What can we assume to be true?

(p. 3, line 18)

There are times when we don't have the facts in front of us, but we nevertheless feel fairly sure we are right in what we say. At other times, we may say things which are incorrect, because we have been guilty of assuming something for which there is no evidence.

In the following exercise, say whether you think that what is being asserted in the column on the left is *safe to assume or unsafe to assume*.

			Safe to Assume	Unsafe to Assume	?
1.	Daisy:	"Benjamin Franklin is always shown wearing shoes. I assume he was hiding something, like maybe he had ten toes on each foot."			
2.	Lyle:	"Benjamin Franklin must have used toothpaste, and I'll bet I know the brand: it was Whoopdedoo."			
3.	Gary:	"I've always heard that Benjamin Franklin discovered electricity, but I've never heard that he invented kites. I assume he didn't invent the kite."			
4.	Trish:	"Since Benjamin Franklin wrote a lot, I assume he could read."			
5.	Hal:	"Since Benjamin Franklin had a large part to play in the founding of the country, I assume he must have once been president."			
6.	Gordon:	"Benjamin Franklin must have once been a kid who ate, slept and went to the bathroom."			
7.	Sylvia:	"In our state, there's a town named Franklin. It must have been named after Benjamin Franklin."			
8.	Betsy:	"How can we assume there was such a person as Benjamin Franklin, when we don't know a single person who ever met him?"			

This exercise deals with different ways of trying to find out what's true.

A number of situations are listed on the left. A number of ways of finding out are listed on the right. You are to match the problem situation with the method you would choose. Give a reason for preferring that method to the others.

- 1. You are asked whether it is now 3 o'clock in the morning.
- 2. You are asked how old you are.
- 3. You are asked whether time is measured in ounces or in inches.
- 4. You are asked whether Reno, Nevada is west of San Diego, California.
- 5. You are asked whether you like ice cream better than chocolate cake.
- 6. You are asked whether George Washington is still president.
- 7. You are asked if salt water freezes.
- 8. You are asked if there will be a war in Asia next year.
- 9. You are asked how far it is to the capital of your state.
- 10. You are asked how you are.

- a. consult a dictionary
- b. consult an encyclopedia
- c. ask the teacher
- d. ask your parents
- e. look at a clock
- f. ask the first stranger you meet
- g. organize a research project
- h. watch TV for the answer
- i. look at a sundial
- i. see if the sun is directly overhead
- k. ask your best friend
- I. think a while
- m. consult your horoscope
- n. check your compass
- o. look it up in an atlas
- p. discuss it with your class
- q. flip a coin
- r. draw lots
- s. ask someone in the sixth grade
- t. consult the morning newspaper
- u. write the President
- v. make a phone call to the person in question
- w. say it's none of your business
- x. consult your birth certificate
- y. consult your memory
- z. answer that the question makes no sense
- aa. conduct an experiment
- bb. none of the above

EXERCISE: Secrets (p. 3, line 26)

This game is played like "May I?" There is a leader who asks the questions and who tells the person answering the question what to do. The questioner stays at one end of the room, and the others line up at the other end of the room, facing the questioner. The winner is the person who first crosses the room.

There are six possible answers. Here is how they are treated:

- 1. For the answer "always," 3 giant steps forward.
- 2. For the answer "never," 1 giant step backward.
- 3. For the answer "sometimes," 2 baby steps forward.
- 4. For the answer "yes," 1 umbrella step forward*.
- 5. For the answer "no," 1 umbrella step backward
- 6. For the answer "I don't know," a somersault forward and a cartwheel backward.

*The person taking an umbrella step holds up a make-believe umbrella and advances a pace forward while turning completely around.

These are the questions:

- 1. Do you like it when your friends tell you secrets?
- 2. Do you like to tell your secrets to your friends?
- 3. Do you keep secrets told to you?
- 4. Do you have a secret hiding place?
- 5. Do you have secret plans?
- 6. Do you have secret friends?
- 7. Do you eat secret foods?
- 8. When you tell your friend a secret, do you always tell the truth?
- 9. Do all of us in this room have a secret?
- 10. Does the teacher have a secret?

ML

Episode 3

(p.3)

Gestures and body language

This episode contains a number of examples of body language in addition to several verbal exclamations. Neil makes a face, holds his nose, and sticks out his tongue. In return, Pixie makes a face with her thumbs in her ears and crosses her eyes. This incident continues the stress on physical activity seen in the very beginning of this chapter. But where the earlier incident involved merely gymnastics, these gestures are expressive and significant. Children resort to emphatic gesturing more frequently than their elders. Adults should not forget that such behavior is communicative and simply an extension of the use of language.

On being a spoilsport

Later in the episode Neil expresses scorn for the zoo trip, which everybody else has greeted with enthusiasm. Neil's conduct is that of a spoilsport. (it may be useful to keep in mind the distinction usualy made between being a spoilsport and cheating. The cheat breaks the rules of the game, but he does not deny the validity of the game. The spoilsport calls the entire game into question.)

Empathy with animals

It is also worth noting that Pixie speaks up in behalf of animals and exhorts Neil to put himself in their place and to imagine his own odor were he confined in a cage all day. In other words, Pixie not only empathizes with the animals herself but demands that those who make fun of the animals do likewise.

Vulnerability to teasing

When we read in various parts of this book about Pixie's mischievous behavior and frequent teasing, we should not forget that there are instances in which Pixie is the victim of teasing. For example, Neil takes advantage of her inability to see the top of her head to tell her that she has bubble gum stuck in her hair. Once again, Pixie is vulnerable to her lack of information.

DISCUSSION PLAN: Friends

(p. 4, line 1)

- 1. Can people talk together a lot and still not be friends?
- 2. Can people hardly ever talk together and still be friends?
- 3. Are there some people who always fight with their friends?
- 4. Are there some people who never fight with their friends?
- 5. Are there some people who have no friends?
- 6. Are there people who have friends, even though they have hardly anything else?
- 7. Do you trust your friends more than anyone else?
- 8. Are there some people whom you trust more than your friends?
- 9. Is it possible to be afraid of a friend?
- 10. What is the difference between friends and family?
- 11. Are there animals you could be friends with, and other animals you could never be friends with?
- 12. Is there any reason you couldn't be friends with Pixie?

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Episode 4

(pp. 3-5)

Secrets

When Mr. Mulligan gives his class their assignment, he first indicates that they are to keep their choice of animal a secret. The notion of a secret holds fascination for children and adults alike. There is something very romantic about knowing something that one will not let the rest of the world know. There is also something very precarious about secrets, because the moment one shares them with others, one runs the danger that the secrets will be revealed to the world. Nevertheless, children engage in a great deal of secret-sharing, promising not to tell and almost invariably telling. There is also an important moral aspect to the idea of a secret, because one's ability to keep a friend's secret is a useful preparation for not betraying that friend. Moreover, having and keeping secrets may enhance a child's developing individuality and sense of personal privacy.

Friendship

Pixie now raises the question of whether one is to treat one's best friend the same as everyone else (in this case, by not revealing one's secret to one's best friend). Certainly, it would be useful, in discussing this passage with your class, to inquire as to what a friend is, and what sort of relationship friendship is. Ask your students to discuss whether there are degrees of friendship and how friendship differs from other social relationships such as the ones one has with relatives or classmates.

The "mystery creature" assignment

Mr. Mulligan explains that each person's secret will be that person's *mystery creature*. Mr. Mulligan's intention, evidently, is simply to indicate that no one in the class will disclose the identity of his or her creature until after the zoo trip. In this sense, the word "mystery" is being used in somewhat the same way as in the expression "mystery story." In a mystery story a crime takes place, but the identity of the perpetrator is not disclosed until the end of the book. As the novel *Pixie* proceeds, a more profound sense of mystery emerges. No answer ever emerges, and reference is made to something unknowable, indescribable, or inexpressible.

The knowledge of another person's mind

Pixie immediately knows what her mystery creature will be, and just as promptly knows that no one else in the class will have the same idea. It is not explained how she can be so sure of what is in other people's minds.

Sharing thoughts

A moment later Pixie is walking hand in hand down the hall with Isabel. They stop and hug each other, and Pixie infers that Isabel and she may have been sharing the same thought.

Knowing other minds by analogy

How are we to understand Pixie's reasoning in this instance? When another individual's behavior is identical with our own, then we can infer by a process of analogy that, at that moment, the other individual has thoughts similar to our own. There is a certain amount of plausibility to this argument insofar as what Pixie means is that reciprocal physical behavior suggests psychological rapport.

EXERCISE: Mystery

(p.4)

On one side of a sheet of paper, list five mysteries. On the other side of the paper tell what makes one of them a mystery.

A. M. S.

EXERCISE: Mystery story

(p. 4, lines 8-15)

Let the class divide up into four groups: those whose first names begin with the letters A through F; those whose first names begin with the letters G through L; those whose first names begin with M through R; and those whose names begin with S through Z.

Now, a situation is presented to the class as a whole. The four groups then separate, going to the four corners of the room. Each group has to come up with a story that will complete the beginning of the story presented in the mystery situation.

Within each group, each individual must construct one sentence. The sentences will later be spoken aloud to the entire class. But the sentences must be in sequence, so as to "tell a story."

1. This is the "mystery situation":

Late one winter afternoon, Ted and Marcie were on their way home from school. It was almost dark, and a light snow was beginning to fall. Suddenly, Marcie said, "Ted, look at that funny little shop! I've never seen it before!"

They crossed the street to look at the sign in front of the shop. It read,

JABEZ SCREECH AND SONS We Kill Words

"I wonder what that means!" exclaimed Ted. Marcie replied, "Why don't we go inside?"

They opened the heavy door, which creaked loudly. The moment they were inside, the door slammed shut, and they could hear the click of the lock. "Gol-leee!" Ted whispered to Marcie, "Look at that!"

2. This is the same assignment, except that the sign on the shop reads:

URIAH SCULL AND SONS New and Used Heads

3. Ditto above, except that the sign reads:

THE AD HOC PAWNSHOP We Pay Highest Prices for Second-Hand Time Sale On Used Minutes

4. Ditto #1 above, except that the sign reads:

MYRON SPRING Surprises

EXERCISE: Turning a mystery into a problem

(p. 4, lines 8-15)

The objective here is to take a simple trick involving numbers, and have the class figure out how it works. At first, of course, it seems very mysterious. Afterwards, it seems obvious.

Step One: Teacher asks any student in the class to think of a number,

but not to say it aloud. Teacher then tells student to

a. double the number

b. add 4

c. divide the resulting number in half

d. subtract the first number thought of.

Step Two: Teacher tells student that the remaining number is 2.

Step Three: Do the trick several more times, so as to demonstrate that the

remaining number is always 2.

Step Four: Give the class the task of figuring out why the remaining

number is always 2.

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DISCUSSION PLAN: Problems and mysteries

(p. 4, lines 8-15)

- 1. Is it possible to understand a problem without knowing the answer to it?
- 2. Is it possible that, in the case of a mystery, you can't understand what it's all about?
- 3. In the case of a problem, such as a problem in arithmetic, is it true that there is usually a method which you can use to solve it?
- 4. Is there a method for solving a mystery?
- 5. If some people in your class have a secret they won't tell you about at all, is their secret a problem or a mystery?
- 6. If you are in a strange city and have lost your way, are you faced with a problem or a mystery?
- 7. If you were to wake up some morning and find yourself on the moon, would you be faced with a problem or a mystery?
- 8. If you were to wake up some morning and find yourself turned into a pumpkin, would you be faced with a problem or a mystery?
- 9. If you were to wake up some morning and find yourself a grown-up, would you be faced with a problem or a mystery? ML

EXERCISE: Different meanings of the word "kind"

(p. 4, line 7)

The two columns below contain comments or expressions that make use of the word "kind." Match the expressions in the left hand column with expressions in the right hand column, where the word "kind" is used in the same way. (Some expressions on the left may have more than one matching expression on the right; some may have none at all on the right.)

- 1. Pixie, she said, "is not my kind of book."
- 2. "What I like about her," he said, "is that she's gentle and kind."
- 3. "No," I told them, "this is not a language arts class. It's kind of a social studies class."
- 4. The baby kittens were taken care of by Rover, instead of by an animal of their own kind.
- 5. They played lots of different kinds of games in school that day.

- A. "This is 'Be kind to animals' week," said Frank.
- B. "You don't like Frank?" screamed Nancy. "I think he's kind of cute!"
- C. "I'm sorry, but that's not the kind of ice cream I like, so I won't have any," she said with a pout.
- D. "How kind of you!" said the taxi driver.
- E. "Is this some kind of joke?" she asked.

Episode 5

(pp. 5-6)

Introspection and inference

Isabel says that Pixie looks like she is daydreaming. In other words, Isabel thinks she can tell from the way Pixie was sitting and, apparently from the expression on her face, that she is deep in reverie. Of course, one could not know this unless one paid attention to one's own posture while daydreaming. These children are not simply conscious, they are introspective, and they are prepared to draw inferences based upon such introspection.

Daydreaming

Your students may very well like to discuss the question of what happens when one daydreams. Is it different from nocturnal dreaming? Is it caused by one's posture? (Are changes in the dream correlated with changes in one's posture while sleeping?) Can one be aware of what is going on in a classroom and at the same time be daydreaming? How can one be sure that at any given moment that one is not having a daydream, rather than discussing daydreaming?

"Falling asleep"

Is the expression "fall asleep" used in the same way when we refer to a person's falling asleep and to a part of his body falling asleep? Or is the first meaning the proper meaning, while the second meaning is a figure of speech? In other words, is the expression "fall asleep" ambiguous?

What is a person?

Another question that comes up in this episode is the complex distinction between a person, a part of a person, and what belongs to a person. Thus, in the case of an individual's body, is his body himself, is it a part of him, or is it something that belongs to him? The same question may be asked with regard to an individual's arm, hair, fingernails, books, toys, room, and so on.

Are we our bodies?

Pixie says, "Either my body and I are the same, or they are not the same." Is pixie right? Is it possible that both could be true? In other words, could it be that in one sense, people are their bodies, but in another sense, they are not? But this raises still another question. If we are not our bodies, then what are we? And if we are our bodies, then how could our body belong to us? It is interesting to note how Pixie reasons in this case. She sets up a pair of alternatives and then proceeds to draw inferences from each alternative.

Puzzlement

Pixie confesses to being puzzled by this question of the relationship between herself and her body. Here we are introduced to another mental act, which is of great philosophical importance. Presumably being puzzled is a kind of wondering, and it raises a question as to just how many other kinds of wondering there might be. One would have to consider various synonyms such as being perplexed, baffled, or bewildered. It would be worthwhile to ask what the differences are among these various mental acts.

The mystery of one's own identity

Pixie speculates that the problematic relationship between the person and the body is very mysterious. She even wonders if she herself is some sort of mystery creature. Surely this is a recapitulation of Pixie's quest for self-knowledge, and it is interesting that she wonders about her own identity.

Belonging

Pixie asks, "Do I belong to my body in the same way as my body belongs to me?" There are two questions here. What does it mean to belong, and what is meant by the word "way"?

The word "belonging" is ambiguous in the sense that things can belong to persons, and on the other hand, persons can belong to organizations. When a thing belongs to a person, it is the property of that person. When a person belongs to an organization, he or she is a part of that organization.

"Way" as "respect"

The word "way" is one of those simple, elementary words that people use all the time but is nevertheless enormously complicated in meaning. In the case of simple objects such as cups, shoes, and pencils, there is no difficulty

EXERCISE: Empathy

(p. 5, lines 1-3)

In the following situations, tell what the person is thinking or feeling:

- 1. Yesterday, you were scolded for something that you didn't do. You cry. Today you saw Jimmy being scolded for something he didn't do. How do you think he feels?
- 2. Last week you got an F on your arithmetic test. You feel very badly. But you know you didn't study. This morning, Irene got an F on her spelling test. She told you at recess that she didn't study. How do you think she feels?
- 3. Today at gym practice, you managed to get 5 baskets. You felt very proud. Carol got 6 baskets. How do you think she felt?
- 4. Last Monday, your mother asked you to go to the store and get some groceries. You remembered everything except the milk. Today, you meet Robert. He tells you he is on his way home, having bought some groceries for his mother. While talking to you, he remembers that he forgot the eggs. How do you think he felt?
- 5. This morning you were late for school. When you got there, the teacher was annoyed. She asked you for a note from your parents. But you had none. You felt very guilty. A few minutes later, Kevin came into the room. The teacher asked him if he had a note from his parents as to why he was late. He did and give it to the teacher. How do you think he felt?
- 6. Last Tuesday was your mother's birthday. You bought her 6 carnations and had them on the table with a card when she came home from work. You felt so happy when she exclaimed, "Oh, what beautiful flowers. Thank you. Thank you." Today you meet Carl coming home from basketball practice. He tells you that yesterday was his mother's birthday and he forgot all about it. How do you think he felt?
- 7. Karen is your best friend. She promised to see the new Mr. Spock movie with you as soon as it came to town. This Saturday it will be at the local theater. You call up Karen and she tells you that she can't go on Saturday because she has to go to visit her grandmother. How do you think Karen felt?
- 8. Everyone in your class is planning on going to Gerard's birthday party. They've been talking about it all week. The day before the party, your classmate, Sam, gets sick. As a result he can't go to the party. How do you think Sam felt?
- 9. On your way home from school, you meet your older brother. He looks like he has been crying. You say, "What's the matter?" He tells you that someone stole his bike. How do you think he feels?
- 10. You invite your friend, Jennifer, over to play at your house. While she is there, she accidentally hits one of your mother's glass vases. It falls to the floor and breaks. How do you think Jennifer feels?

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seeing them or touching them or pointing to them. But a form, manner, or

way of acting is not so readily perceived or designated. When Pixie says "in the same way," she means in the same respect. Children might not use the

phrase "in the same respect," but it is very important philosophically because it suggests that when making a comparison, one must be clear

about which criteria are to be employed. To ask "Is it in the same respect?"

in this sense, is to require that the same criterion be used when two things

are being compared. For example, if I say John is bigger than George, do I

mean in respect to height or in respect to weight?

DISCUSSION PLAN: Daydreaming

(p. 5, lines 5-6)

- 1. What's the difference between daydreaming and dreaming while you're asleep?
- 2. Can you remember your dreams?
- 3. Can you remember your daydreams?
- 4. Can you play a game and daydream at the same time?
- 5. Can you watch television and daydream at the same time?
- 6. When you daydream, does a story get made up?
- 7. If so, does the story have a beginning, middle and end?
- 8. Does the story make sense?
- 9. Are you usually in your daydreams?
- 10. Do you daydream about your having an adventure?
- 11. Do daydreams ever come true?
- 12. Can you talk to your friends and continue daydreaming?
- 13. Could you put one of your daydreams into play form?
- 14. If so, could your classmates act it out on a stage?
- 15. Do impossible things happen to you in your daydreams?
- 16. Would you be very sad if you couldn't daydream any more?
- 17. Do you ever learn things from daydreaming?
- 18. If so, what kind of things?
- 19. Do you learn from daydreams the way you learn from studying a map?
- 20. Do you learn from daydreams the way you learn from your teacher?

A. M. S.

EXERCISE: Mental acts

(p. 5, lines 8-9)

In each of the following sentences, two words are omitted. Which of the two words in parentheses would you place in each of the blanks? (If you think either word could go in either blank, explain why you think so.)

1.	When I	her name, I	that
	knew her. (realized, re	emembered)	
2.	Just when I more homework to do	I was finished, I o. (thought, learned)	had
3.		the numbers in each of the columns, the two sums. (subtracted, added)	, and then
4.	I(knew, wondered)	_ whether she n	ny address
5.	I him. (chose, decided)	to give him the present I	fo
	,		Ml

Say whether or not you think the following are parts of you:

- 1. your feet
- 2. your ears
- 3. vour breath
- your hair (before cutting)

DISCUSSION PLAN: Parts of you

- 5. your hair (after cutting)
- 6. your saliva
- 7. your thoughts
- 8. your feelings

- 9. your memories
- 10. your parents
- 11. your clothes
- 12. your drawings
- 13. things you've written
- 14. your world
- 15. things you say.

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(p. 5, lines 10-11)

DISCUSSION PLAN: What is it that makes you you?

(p. 5, lines 23-26)

Would you still be you if

- a. you had a different name?
- b. you had a different face?
- c. you had a different body?
- d. you had a different mind?
- e. you had different fingerprints?
- f. you had different parents?
- g. you had different grandparents?
- h. you were born and raised in China?
- i. everyone in the world thought you were someone else?

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DISCUSSION PLAN: Do we own our bodies?

(p. 5, line 24)

- 1. Do you own your books?
- 2. Do you own your bed?
- 3. Do you own your home?
- 4. How can you tell the difference between something your family owns and something you own?
- 5. How can you tell the difference between something the school owns and something you own?
- 6. Does anyone own the sun and the moon and the stars?
- 7. Does anyone own the earth?
- 8. How can you tell the difference between things people own and things no one owns?
- 9. Is your body (a) something you own?
 - (b) something other people own?
 - (c) something no one owns?
- 10. Is your body the same kind of thing as your bed or your toothbrush?
- 11. If your body is part of you, does that mean that you don't own it?
- 12. If your body is not part of you, does that mean that you own it?
- 13. If you believe you own your body, does that mean it isn't part of you?
- 14. If you don't believe you own your body, does that mean it's part of you?
- 15. Is it possible that your body is not a part of you, but that you are part of it?

ML

EXERCISE: Puzzlement

(p. 5, line 25)

Which of the words in parentheses at the end of each sentence would be best to put in the place of the word in italics? (Sometimes there might be more than one suitable answer; sometimes there might be none at all).

- 1. When I *doubt*, I (study) (grieve) (am unsure) (wonder) (am puzzled).
- 2. When I am uncertain, I (am undecided) (regret) (believe) (fall out).
- 3. When I am perplexed, I (deliberate) (wonder) (am puzzled) (lie).
- 4. When I am bewildered, I (am confused) (give up) (am rattled) (cry).
- 5. When I reflect, I (fear) (reason) (choose) (think) (remember). ML

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EXERCISE:		~

(p. 6, line 1)

The word "belonging" has a number of different meanings. Among them:

- (a) *belonging* as a part belongs to a whole—for example, the way the leg of a table belongs to the table.
- (b) *belonging* as a member of a group belongs to a group—for example, the way you belong to your class in school.
- (c) we also use the word "belongings" (in the plural) to mean "property"—as, for example, when we say, "The hurricane destroyed their house and all their belongings," or when we say, "the property belonging to us."

Examine the way words "belonging" or "belongings" are being used in the following remarks, and say whether they are examples of a, b, or c:

		а	b	С	7
1.	The motor belonging to the car was found far from the other wreckage of the car.				
2.	Near the scene of the accident, the police found a gun belonging to the victim.				
3.	Proof was discovered that the victim belonged to a dangerous gang.				
4.	"These are my hands," said Jack. "They belong to me."				
5.	After the field trip, the students returned to the different schools to which they belonged.				
6.	The owner of the Yankees said, "You can't have that player! He belongs to us!"				

EXERCISE: Ways (p. 6, line 11)

Match the way the word "way" is used in the expressions on the left with the phrases on the right.

- 1. As the President arrived, the police made way for him.
- 2. Ed said, "Jim's nice, but I don't like some of his ways."
- 3. The baby screamed, and his mother said, "He just wants to have his way."
- 4. Jack said, "The way up the mountainside is very rough.
- 5. China is a long way from Chile.
- 6. Within a few minutes, the ship was under way.
- 7. "Well, Jill exclaimed, "that sure is the way of the world!"
- 8. "You skate your way," said JoAnne, "and I'll skate mine."
- 9. Frank said, "You go this way, Cindy, and I'll go that."
- 10. "Out our way," said Marie,
 "the weather's real bad."

- a. a means of passing from one place to another, such as a road or path
- b. forms of conduct
- c. the usual or customary manner in which things happen.
- d. a method or manner of doing something
- e. direction
- f. an opening, as in a crowd
- g. a district, region or area
- h. the beginning of movement, as of a train being "under way."
- i. wish or desire
- j. distance

ML

EXERCISE: The word "way"

(p. 6, line 11)

In the following sentences, see if you can give another word for the word "way," and still keep the meaning of the sentence.

- 1. "She is determined to have her way."
- 2. "Which way are you going, Jim? I'll walk with you."
- 3. "There is only one *way* to make an ice cream sundae as far as I'm concerned."
- 4. "That's just her way. She is not upset."
- 5. "Can you cook an egg the same way as my mother?"
- 6. "There is no way I am going to have my picture taken."
- 7. "Mary walked me all the way home."
- 8. "I'll do it my way, if you don't mind."
- 9. "Is there another way that you know of?"
- 10. "Clowns go with circuses the same *way* as teachers go with schools. At least that's the *way* I figure it."

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EXERCISE: Talking, discussing, conversing

(p. 6, lines 14-16)

How would you classify the following:

		Talking	Discussing	Conversing	?
1.	Two announcers describing a baseball game.				
2.	You and your friend on the telephone.				
3.	You and your parents when you bring home a report card that's not very good.				
4.	You and the person at the check-out counter in the store.				
5.	Two actors in a play, addressing each other.				
6.	Two dogs barking at each other.				
7.	Diplomats from different countries working together on a treaty.				

DISCUSSION PLAN: Talking

(p. 6, lines 14-16)

- 1. Do you like to talk? If so, under what circumstances? If not, why not?
- 2. Do you think while you talk?
- 3. While you talk, do you watch the faces of the people to whom you are talking, to see if they are following you?
- 4. Do you listen while you talk?
- 5. While you talk, do you think ahead to what you are going to say next?
- 6. When you start to say a sentence, do you know all the words that you are going to use, and just how you are going to arrange them?
- 7. If you don't know when you start a sentence, how you are going to end it, how can you be sure you know what you're talking about?
- 8. Do you learn a lot from having conversations with your friends?
- 9. Do you learn a lot from having conversations with grown-ups?
- 10. Which do you think about longer afterwards, conversations with grown-ups or with your friends?
- 11. Are there times when you can't put what you mean into words?
- 12. Are there times when you do a lot of talking, but you know it doesn't mean very much?
- 13. Which is more important, to be able to mean what you say, or to say what you mean?
- 14. Do you sometimes say things you hadn't intended to say?
- 15. Which would you prefer, to think more, to speak more, or to write more?

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Episode 6

(pp. 6-7)

Metaphor

In this episode we encounter Brian, who doesn't talk and apparently hasn't talked in years. Mr. Mulligan says there's nothing wrong with Brian. He just doesn't want to talk. To Pixie it must be a mystery why anyone wouldn't want to talk, especially in view of her own incessant talking. Pixie tries to strike up a conversation with Brian but is unsuccessful. Brian doesn't seem very interested in the fact that Pixie's arm fell asleep. Pixie resorts to a few similes. Her arm felt like it was made of rubber. Her arm felt like it wasn't her arm at all. Brian continues to be silent. She then says, "How would your arm feel if it was made of rubber?" Notice that this is very much like the question she has just asked Neil, "How would you like it if you had to stay in a cage all day?" Pixie is not abstract. She asks Brian to consider how. it would feel. Brian keeps staring at her with "those eyes of his that seem to look right through you." In the last few lines, Pixie refers to Isabel's remark that Brian has the eyes of a wolf and to her mother's remark that Pixie has her father's mouth. Are these two remarks to be understood in the same way? Isabel's remark would seem to be a metaphor. Isabel doesn't literally mean that Brian has wolf's eyes. But she does mean that in one respect, Brian's eyes are better described as those of a wolf than as those of a person. A wolf has light eyes (grayish with a very penetrating gaze). For a person to have such eyes is rather uncanny. Thus, we have recourse to a metaphor when we try to describe them.

Family resemblances

The remark of Pixie's mother is a different type of metaphor. It is not literally true that Pixie has her father's mouth but there is what is called a "family resemblance." A "family resemblance" is a trait that is shared by some members of a family but not all. Some members of a family may have similar eyes, noses, mouths, etc. No one trait is shared by everyone, but each individual may have more than one of the family traits. Thus, people look at an individual member of the family and exclaim, "That must be a member of the ______ family, because they have noted certain family resemblances.

Do we always know "for sure"?

You might ask your students why they think Pixie tried to talk to Brian even though she said that it would be a waste of time. She knew he wouldn't answer her. If she knew it, why did she try anyway?

DISCUSSION PLAN: Family resemblances

(p. 7, lines 9-10)

Part One:

- 1. In what ways are all games like one another?
- 2. In what ways are all the countries of the world like one another?
- 3. In what ways are all the subjects you take up in school like one another?
- 4. In what ways are all the members of your family like one another?
- 5. In what ways are all jobs like one another?

Part Two:

- 1. Are there ways in which some (but not all) games are like other games?
- 2. Are there ways in which some (but not all) countries are like other countries?
- 3. Are there ways in which some (but not all) subjects are like other subjects?
- 4. Are there ways in which some (but not all) members of your family are like one another?
- 5. Are there way in which some (but not all) jobs are like one another?

Part Three:

Which are what are called "family resemblances": those in Part One, or those in Part Two?

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EXERCISE: Family resemblances

(p. 7, lines 9-10)

Mr. John Jones is the son of Lucy and Walter Jones. Mary Jones, the wife of John Jones, is the daughter of Wendy and Henry Smith. John and Mary Jones have three children: Edward, Suzy and Betsy. Here is a diagram of their family:

Now here are the resemblances:

- 1. John Jones has his mother's mouth, his father's nose, and his mother's eyes.
- 2. Mary Jones has her mother's chin, her mother's ears, and her father's mouth.
- 3. Edward Jones has Lucy Jones's nose, Henry Smith's mouth, and John Jones's ears.
- 4. Suzy Jones had Wendy Smith's eyes, Walter Jones's ears, and Mary Jones's hair.
- 5. Betsy Jones has her father's nose, her mother's mouth, and her mother's eyes.

Questions:

- 1. Which member of the family looks most like Henry Smith (other than Henry himself)?
- 2. Which member of the family looks most like Wendy Smith?
- 3. Which member of the family looks most like Lucy Jones?
- 4. Which member of the family looks most like Walter Jones?
- 5. Which member of the family looks most like John Jones?
- 6. Which member of the family looks most like Mary Jones?
- 7. None of John Jones's features looks like any of Mary Jones's features. Nevertheless, would it be possible for, say, Suzy Jones to have a nose that resembles both her mother's nose and her father's nose?
- 8. Is it likely that Edward, Suzy and Betsy resemble each other more than their parents resemble each other?
- 9. Is it possible that Edward, Suzy and Betsy resemble their grandparents as much as they resemble their parents?
- 10. Is it possible that Edward, Suzy and Betsy all look like the children of John and Mary Jones, even though they don't look much alike?

Teacher Self-Evaluation Chapter One

- 1. Are children sitting in such a position so they can see each other when they talk?
- 2. Am I in a position within the group so I can speak to and listen to each student?
- 3. Is the room atmosphere sufficiently quiet so the children can hear what each other say?
- 4. Can my students recognize and cite examples of ambiguities?
- 5. Am I asking all the questions?
- 6. Do I encourage the children to comment on what each other says?
- 7. When a student responds, do I follow the response up with another more probing question, or just go on to the next child?
- 8. Do the discussions seem to build?
- 9. Am I bombarding students with too many questions, instead of staying with a few, but helping students to develop them?
- 10. Can my students distinguish between a secret, a mystery and a problem?

CLASSROOM DIALOGUE	
Date	
Topic	

WHAT THE STUDENTS ACCOMPLISHED DOING THIS CHAPTER

Specific Skills Taught

Specific Skills Reenforced

Specific Skills to Work on in the future

REASON THEY WORKED

EXERCISES IN THIS CHAPTER THAT WORKED

Students who talked to me many times while doing this chapter. Students who directed remarks to other students many times

while doing this chapter.

STUDENT EVALUATION

Students who are regularly giving reasons for their views during discussions.

Students who were very silent during classroom discussions.

Students who are not giving reasons for views they express

Students who need work on directing their comments to other students rather than to me.	
Students who need work on drawing correct inferences in classroom discussions.	
Students who might be inhibiting others from talking during classroom discussions.	
Students who need teacher encouragement to elaborate on their ideas, especially in terms of what follows from what they say.	
Students who need extra help on one of the thinking skills covered in this chapter.	skill skill skill skill skill skill

CHANGES I WOULD MAKE NEXT TIME I DO THIS CHAPTER

CORRELATED EXERCISES I WOULD USE

OVERLAPPING THEMES FROM THIS CHAPTER WHICH OCCUR IN OTHER DISCIPLINES I TEACH

OTHER

DANCE EXERCISES

CHAPTER TWO

Episode 1

(p. 8)

Brian's case

Pixie and Isabel discuss Brian's case. Pixie wonders what goes on in Brian's mind and how, if he doesn't talk, he can invent stories. Isabel does not see it as a problem. She says, "With Brian, anything's possible." Ask your students what Isabel is suggesting.

Thinking as internal dialogue

Pixie concludes that Brian must tell himself stories that he has made up. This is a rather odd inference to draw. Pixie is bringing up the notion of thinking as an internal dialogue in which Brian is both story-teller and listener. The process of internal dialogue presents interesting possibilities. Could Brian tell himself a story and not listen?

Is everything possible?

Isabel says that with Brian anything is possible. Is she right? For example, could Brian believe the two following statements at the same time: "I am taller than. Pixie", and "I am shorter than Pixie"? Could Brian make up a story and not tell it to himself? Could Brian make up a story and be a listener and teller at the same time? Could Brian listen "to himself if he wasn't talking to himself?

Thinking and writing

Another issue that comes up in this episode is that of the relationship between thinking and writing. Everything that a person does deliberately involves thinking, including writing. A person may plan extensively what to write before engaging in the physical action of applying pencil to paper. Even while writing, one appraises, evaluates, infers, and engages in a great many other mental acts. Thinking and writing are not two separate activities. Rather, they are intermingled with one another, although in different degrees on different occasions.

Comparisons

Pixie's next remark would seem to be the result of very careful reflection on her own perceptions. Even adults don't usually analyze friendship so meticulously. What makes Pixie so philosophical is her resolve to concentrate on comparisons in order to discover relationships of similarity and difference. Sometimes the comparison is an exact one, and sometimes it is stated in figurative language because the resemblance or difference is inexact. We have just seen instances of Pixie's concern with similarities and differences when she compared Brian's eyes to the eyes of a wolf and her mouth to her father's mouth. In this episode, she compares herself to Isabel and the color of Isabel's eyes to the color of daylilies. This is a precise comparison. It shows a real concern for accuracy. She really has to think of the color of Isabel's eves and then find a flower of just that color. We can encourage children to look for this kind of precision in the descriptive statements that they make. "What color is Johnny's shirt? It's the same red as in a Coca Cola sign." The ability to make precise and literal comparisons is as important for the scientific development of the child as the ability to make figures of speech (inexact comparisons) is for the child's literary development.

Perceptual relationships

When Pixie says that Isabel's hair and eyebrows are the "blackest black," she is making a different type of comparison. She is thinking of the range of colors and then thinking of the hues in each color. It is almost as if she were trying to place the color of Isabel's hair in the spectrum (although, of course, black is not in the spectrum.) You can do similar exercises with your students. Get a paint chart from a local paint store and ask your students to find things in the classroom whose colors correspond to the chips on the paint chart. It is an exercise in precise perception.

DISCUSSION PLAN: Stories

(p. 8, line 1)

- 1. Would you rather tell a story or listen to a story?
- 2. Would you rather make up a story or read one that's already made up?
- 3. Which do you like more stories about children or stories about animals?
- 4. Which do you like more stories about what did happen or stories about what might happen?
- 5. Which do you think you would like more a story about what goes on in your mind or a story about what goes on in your stomach?
- 6. Which do you think you would like more a story about a little boy who grew up in a forest where he was cared for by deer, or a story about a little deer who went to school, where he was taken care of by children?
- 7. If a fairy tale doesn't end with the words "and they lived happily ever after," does that mean they didn't live happily ever after?
- 8. Do you think you could make up stories about what was going on in Pixie's life before Chapter One of Pixie?
- 9. Do you think you will be able to make up stories about what could happen in Pixie's life after the end of Pixie?
- 10. When do you do the most thinking: when you're listening to a story; when you're reading a story yourself; or when you're talking about a story afterwards?

ML

EXERCISE: Making things up

(p. 8, line 3)

What is the difference between making something up and

- 1. discovering something?
- 6. pretending?
- 2. inventing something?
- 7. imagining?
- 3. learning something?
- 8. changing your mind?

4. guessing?

9. making up your mind?

5. lying?

10. figuring something out?

ML

EXERCISE: What happens when we think?

(p. 8, line 4)

When thinking is going on, we may be doing many things, like wondering and imagining; believing and understanding; remembering and anticipating. Look at the following examples and tell what kinds of thinking you are doing.

- 1. Thinking about your best birthday.
- 2. Don't think about an elephant.
- 3. Think about an enchanted island.
- 4. Think about thinking.
- 5. Think about your next vacation.
- 6. Think about 2 + 2 = 4.
- 7. Think about your best friend.
- 8. Think about something you want very much.
- 9. Think about the back of your head.
- 10. Think about a peanut butter and mayonnaise sandwich.

ML

EXERCISE: Is everything possible?

(p. 8, line 8)

- 1. 1.Is it possible to think your best friend's thoughts?
- 2. Is it possible to think of a river that runs uphill?
- 3. Is it possible to think of a circle that's really a square?
- 4. Is it possible for a cat to give birth to puppies?
- 5. Is it possible for there to be a sound without anyone to hear it?
- 6. Is it possible for Monday to be the day after Tuesday?
- 7. Is it possible for there to be a thought without someone to think it?
- 8. Is it possible that you are now dreaming that you are awake?
- 9. Is it possible that you are now on the moon?
- 10. Is everything possible?

PG

ML

EXERCISE: Same and different meanings

(p. 8, line 10)

Come Different 2

In which cases do the underlined words have the same meaning, and in which cases are the meanings different?

		Same	Different	?
1.	The farmer put the pig in the <i>pen</i> . The police put the convict in the <i>pen</i> .			
2.	While driving, we found ourselves in a <i>jam</i> . We looked through the groceries, and found the <i>jam</i> .			
3.	The umpire <i>gave a ball</i> to the catcher. The king and queen <i>gave a ball</i> in the palace.			
4.	Joe: "These shoes are made of <i>tough</i> materials." Moe: "Everything's going wrong. Life is sure <i>tough</i> !"			
5.	The boy <i>caught</i> the ball. The boy <i>caught</i> measles.			
6.	Jill: "I would like to <i>succeed</i> in business." Joan: "I would like to <i>succeed</i> you as our president."			
7.	The movie actor <i>held</i> our attention. The carton <i>held</i> the milk.			
8.	The policeman <i>held</i> the suspect. The brick <i>held</i> the door.			
9.	Fred <i>missed</i> the bus. Linda <i>missed</i> her childhood home.			
	Tad: "My father isn't at home; he's at work." Sue: "That's not play, that's work!"			
11.	1 st man: "I'll bet I can make a <i>flatter</i> pizza than you.' 2 nd man: "Don't <i>flatter</i> yourself!"			
12.	They found the picture very <i>moving</i> . They found the men <i>moving</i> the furniture.			
13.	The policemen <i>grasped</i> the suspect firmly. The children quickly <i>grasped</i> the idea.			
14.	The girl <i>drew</i> money out of the bank. The horse <i>drew</i> the carriage.			
15.	The artist <i>drew</i> the picture carefully. In order to decide who would go first, they <i>drew</i> straws.			
			-	

EXERCISE: Similarities and differences

(p. 8, lines 10-12)

When you try to compare two things, sometimes similarities are important and sometimes differences are important. Yet, not all similarities are important, for instance, both trucks and whales are big, but that's not usually an important similarity for comparing the two. Again, not all differences are important, for instance, one book has 120 pages while another has 130 pages. See if you can tell whether the similarities and differences in the following are important. Can you think of other similarities and differences that would be more important?

- 1. Whales and fish are similar because they both live in the ocean.
- 2. Typewriters and pencils are different because typewriters are large with many parts, while pencils are small with few parts.
- 3. Windup watches and digital watches are similar because they both tell time.
- 4. Identical twins are similar because they are both born at the same time.
- 5. Baseball and football are different because they are played different seasons of the year.
- 6. Spelling and arithmetic are similar because you have to memorize the answers for both.
- 7. Children and adults are different because of their ages.
- 8. All pets are similar because we have a responsibility to take care of them.
- 9. Games are similar because they all have rules.

PG

EXERCISE: Alike and not alike

(p. 8, lines 10-12)

Which of the following would you say are alike, and which would you say are not alike:

		Alike	Not Alike	?
1.	Tweedledum and Tweedledee			
2.	The five letter e's in the word Tweedledee			
3.	Two cans of Campbell's Vegetable Soup			
4.	Two copies of Pixie.			
5.	Two snowflakes.			
6.	Two fingerprints from the same person.			
7.	Two grains of sand in the desert.			
8.	Two stars in the sky.			
9.	Two sides of your face.			
10.	Isabel and Miranda.			
				ML

DISCUSSION PLAN: Same and different

(p. 8, lines 10-12)

- 1. If two things are not the same, must they be different?
- 2. If two postage stamps are alike, are they different stamps?
- 3. If you melt a chunk of wax, is the melted wax different from the chunk of wax?

PG

EXERCISE: Likes and dislikes

(p. 8, line 12)

Which of the following do you always like and which do you always dislike? (Put a question mark if you're not sure, or if your answer is "only sometimes"). In each case, give a reason for your choice.

		Always like	Always dislike	?
1.	Cats			
2.	Sundays			
3.	Movies			
4.	Ice cream			
5.	Friends		.□	
6.	Scary things			
7.	Presents			
8.	Babies			
9.	Fires			
10.	Baths			
				ML

EXERCISE: Perceiving scaled differences

(p. 8, line 13)

Teacher: Obtain a number of color charts from a paint company. The greater the number of colors on the charts, the better. And if you could get one chart for each student, that would be good, too.

Next, assign each student the task of finding five different objects whose colors match exactly five different colors on the paint chart.

Let the class observe and discuss cases where two different objects are said to have the same color in the paint chart.

Finally, bring into the classroom an object whose color is obviously different from anything on the chart, and ask your students which colors they would mix to obtain a color like that of the object.

EXERCISE: Precise comparisons

(p. 8, line 14)

Find objects which would be properly described by the following sentences. For example, if the sentence is "This is as round as that one," you could produce two ping-pong balls, or two tennis balls, or two plates from the same setting.

1.	This	is as hot as that.
		is as square as that.
3.	This	is as red as that.
4.	This	is as soft as that.
5.	This	is as rough as that.
	This	
		is as heavy as that.
	This	
		is as ugly as that.
10.	. This	is as irregular as that.
11.	. This	is as ordinary as that.
12.	. This	is as simple as that.
13.	. This	is as tired as that.
	. This	
	. This	

ML

Episode 2

(p. 9)

Reasons for secrecy

In this episode, Pixie engages in considerable reasoning to defend what she does. Primarily she wants to justify keeping her mystery creature a secret from Miranda. First, she offers a series of reasons for sharing the secret: She's my sister, she's older, and we share the same room. These reasons are rejected as insufficient to require that Miranda be told everything. Next, Pixie offers three reasons why she shouldn't tell Miranda. The first two involve resentment: Miranda keeps her diary secret from Pixie, and Miranda treats Pixie contemptuously in front of her friend Sue. Finally, it turns out that Miranda is also a bed hog.

Internal dialogue

Thus, we see how analytical Pixie is. She can't just take it for granted that she doesn't have to tell Miranda her secret. She has to conduct a whole court case, playing both prosecutor and lawyer for the defense. It is very much like Brian telling himself stories and listening. In other words, it's another internal dialogue.

Respecting another's privacy

Pixie doesn't seem to resent having to share the room with Miranda. She's not complaining about the lack of privacy. She's asking why they can't both share and not share. With regard to Miranda's diary, she is willing to wait to be shown the contents. She would never read it without Miranda's permission because she respects Miranda's privacy.

Is privacy important?

Are people more themselves in their private lives than in their public lives? Is Miranda more herself when she is writing in her diary than when she is speaking to Sue or Pixie? Is privacy important for growing up? Could people do without it? What would be lost?

ML

Treating people as things

Pixie can't stand being talked about in the third person. Why? Does she resent being talked about when she is present or being treated as some kind of obnoxious thing to be gotten rid of? Either way, she is being treated not as a person but as a thing.

Ambiguity

Finally, there's Pixie's awareness of her own ambiguity with reference to the word "side." Again, it is obvious how careful Pixie is with words.

DISCUSSION PLAN: Treating a person as a person (p. 9, lines 12-14)

Is it treating a person as a person if:

- 1. you keep staring at that person?
- 2. you talk about him as if he weren't there, right in front of him?
- 3. you put him in a garbage can when you are finished talking to him?
- 4. you interrupt him whenever he begins to talk?
- 5. you answer him politely when he asks for directions?
- 6. you show him that you are interested in what he thinks and his reasons?
- 7. you ask him to play the role of a wall in the class play?
- 8. you never do anything without first asking him what to do?
- 9. you let him do all your thinking for you?
- 10. you change the subject whenever he disagrees with you?

ML

EXERCISE: The meaning of "tell" (p. 9, lines 3-7)

In each case, say whether you think the meanings are the same or different:

			Same	Different	?
1.	Fritz: Gretchen:	"How do you tell time in Spanish?" "That depends on what you want to tell it."			
2.	Pierre: Louise:	"How do you tell hearts from diamonds?" "Ask me no riddles, I'll tell you no lies."			
3.	Sonia: Boris:	"How can you tell a phone from a phone booth?" "Don't tell me, let me guess."			
4.	Derek: Pamela:	"Tell me a tale of long, long ago." "I may kiss, but I don't tell."			
5.	Luigi: Carla:	"My grandfather's age is beginning to tell on him." "How can you tell?"			
6.	Pepita: Juan:	"I always want to tell Boris off." "I can tell that just by looking at your face."			
7.	Ingrid: Eric:	"I shall sit by the fire and tell my beads." "To tell the truth, that's just what I was about to do."			

EXERCISE: Ambiguities

(p. 9, line 17)

Each of the following sentences can be read in at least two different ways. Tell what the different meanings are in each case:

Part I.

- 1. The actor with the broken leg was placed in a large cast.
- 2. Lulu: "You can always count on the cafeteria: there's nothing fresh here but the boys."
- 3. Prisoner: "I'm tired of being cooped up all the time in this same cell. I think it's time for a break."
- 4. The elephant helped the circus get packed by lifting the tree by the trunk.
- 5. Judge: "I feel out of practice, so maybe I'd better hold lots of trials."
- 6. When he finished peeling the potatoes, John lifted his eyes from the plate.
- 7. She was greatly thrilled and watched the oil well gushing.
- 8. The policemen jumped up when they heard the report.
- 9. The swimmers didn't want the lifeguard to catch them, so they ducked him.
- 10. Everyone but the umpires saw the play.

Part II.

- 1. Teacher: "I took this exercise out of the Teacher's Manual."
 Phyllis: "That's good! It should never have been there in the first place."
- Salesman: "This freezer will soon pay for itself." Mrs. Jones: "Fine! As soon as it does, send it over."
- 3. Visitor: "Well, son, have you lived here all your life?" Archie: "Not yet."
- 4. Clerk: "Is there a certain kind of blanket you're looking for?"

Mitzi: "Not really. I'm just looking for a friend."

Clerk: "Have you tried asking for your friend at the information desk?"

5. Carol: "Do you like visiting relatives?" Ginger: "Yes, but not too many at a time."

6. Nicole: "Does everyone here have enough money to get into the movies?"

Arnold: "Well, Gail's a little short."

Nicole: "Then maybe they'll let her in at the children's rate."

ML

EXERCISE: The meanings of "nice"

(p. 9, line 24)

See if you can match the expressions on the left with the phrases on the right. (A phrase may fit more than one expression, and an expression may fit more than one phrase.)

- 1. "Be nice!"
- 2. "That's nice!"
- 3. "What a nice day!"
- 4. "We have a nice homework assignment."
- 5. "We have nice neighbors."
- 6. "We have a nice teacher."
- 7. "Mary always looks nice."
- 8. "How nice of you to think of me!"
- 9. "Mary does really nice sewing."
- 10. "Mary's watercolors are really nice."

- a. pleasant
- b. kind
- c. thoughtful
- d. modest
- e. well-mannered
- f. good
- g. excellent
- h. fine
- i. careful
- i. delicate
- k. accurate
- . difficult
- m. interesting
- n. right
- o. considerate
- p. pretty
- q. decent
- r. attractive
- s. proper
- t. well-dressed

Episode 3

(pp. 9-11)

Wondering at the world

This episode, although a digression from the story, exhibits Pixie's philosophical skill. What is Pixie doing when she relates her rather bizarre experiences? She's not theorizing or speculating about remote possibilities or engaging in a flight of fancy, she is genuinely puzzled by some aspect of her personal experience which another person would have taken very much for granted. In brief, *Pixie wonders at the world*. She confronts her experience and asks "How could this be?" What sort of world is it in which things like this can happen? How am I to explain something like this to myself and to my friends? Do things always happen like this, or is this something strange and uncommon?" And finally, "What do experiences like this do to my understanding of the world?"

Seeking understanding

Pixie's reflections on her personal experience are not simply efforts at self-knowledge; they are philosophical efforts to understand a world in which such things can happen. For example, experiencing a part of one's body as numb is not at all uncommon. It happens when the dentist administers novocain, when one hits one's funny bone, has feet that are very cold, or when a leg or arm "falls asleep." It happens all the time, and most people don't wonder about it. Not only does Pixie wonder about such things but she asks what does this do to my concept of a person. In other words, like a philosopher, Pixie stops at moments like these and says, "Hold on now; just a moment; what's the meaning of this?"

Implying and inferring

At the beginning of the episode, Pixie says, "It's not nice to be pushy!" Ask your students what the context must be for Pixie to say such a thing. For example, suppose you suddenly interrupt your conversation with someone and exclaim, "Oh, I meant to put out the lights before I left the house." What are you implying? The sentence is out of context, but what can another person infer? One could infer that you came from your house, and secondly, that you didn't put out the lights. You're not saying it, you're implying it. Even a listener who hears this remark completely out of context will be able

to infer that you didn't turn off the lights. It is important to give children exercise in drawing inferences from suggestions as indirect as this in order to develop their skill in finding meanings.

Exhibitions of unreasonableness

On the other hand, Pixie is perfectly capable of introducing complete *non sequiturs* into her narrative. She is totally shameless in the way she does so. She breaks into her own story to brag to the reader that she can do three cartwheels in a row, admits that the fact is totally irrelevant, and then proceeds to justify her interruption of her own story on the grounds that she can do this and the reader can't.

Simile as comparison

Pixie proceeds now to tell her little story about the leg that "felt like it was made of rubber," a comparison similar to the one she used with regard to her arm that had fallen asleep. She then proceeds to another comparison. Miranda's foot looked just like her foot. Strange comparison: it was her foot! No wonder it resembles her foot!

The shock of recognition

At this moment, Pixie experiences the shock of recognition. It's my foot! Why is it so shocking? First, she didn't recognize a familiar part of her own body, and second, when she finally did so, it was the realization of a brute fact. There's a certain kind of brutalness in seeing one's reflection in the mirror. It is not merely surprise that such a being exists, but one's realization that the creature whose reflection is being viewed is oneself. It is what makes one's own identity, normally so secure, the most inexplicable aspect of existence.

Loss of control and alienation

Shortly after Pixie boasted about how well she can control her body, sheconfessed to an experience in which a part of her body seemed to be totally out of her control, and, as a result, foreign to her.

Ambiguity and analogy

The next morning Pixie tries to discuss the experience of the previous night with Miranda, and Miranda appears to be quite uninterested. Pixie begins with an implicit analogy. She asks Miranda, "Do you think that, if my head falls asleep, I'll think it's yours?" Spelled out, the analogy would read like

this: "When my foot falls asleep, I think it's yours, and so therefore when my head falls asleep, I think it's yours." In criticizing the analogy, your students will probably point to the change of meaning in the two uses of the phrase "falls asleep." Obviously, two different things happen when one's foot "falls asleep" and one "falls asleep" as a person. Take this opportunity to show your class how identifying a faulty analogy can resolve an ambiguity.

Reflexive behavior

Miranda's response is to display a total lack of interest. But, at the same time, it may be worth noting that Miranda makes the remark while observing the cat chase his tail. The cat chasing his tail is a classic example for philosophers of the problem of *reflexive* behavior. Does the cat think it is chasing itself? Does the cat think it is chasing a part of itself? Or does the cat think it is chasing something that is not itself at all but just happens to stay out of reach every time the cat tries to grab it? When the cat chases its tail, it behaves as though its tail were an independent object. Miranda may suspect that what Pixie has been up to is not much different from what the cat has been up to.

Questions and problems

Finally, Pixie expresses her exasperation with Miranda, who "never sees anything as a problem" and "isn't even *interested* in the questions!" Of special interest here are Pixie's priorities; she seems to assign priority not to answers or solutions but to questions and to "seeing things as problems." Ask your students why Pixie would do such a thing? Why would anyone think it's important to look at things as problems. Why can't she just take things as they are and not raise questions about everything? Why doesn't she just accept the answers that are given? These questions are characteristic of philosophy.

DISCUSSION PLAN: Dreams and stories

(p. 10, lines 7-8)

- 1. Do you have dreams in which you do not have a part?
- 2. Can you have a number of different dreams without waking up?
- 3. Do your dreams tell you anything about the future?
- 4. Do your dreams seem to make sense to you while they're happening?

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5. Like stories, do dreams have a beginning, a middle and an end?

- 6. Like stories, are some dreams better than others?
- 7. Do dreams seem real to you while they're happening? Do good stories seem real to you while they're happening?
- 8. Is having a dream more like listening to a story, or telling a story you've made up?
- 9. In what other ways are having a dream and listening to a story alike?
- 10. In what other ways are having a dream and listening to a story different?

ML

EXERCISE: When does something not follow?

(p. 10, lines 1-2)

Pixie interrupts her story to talk about the number of cartwheels she can do. As she admits, there's no connection between her story and her ability to do cartwheels. Her remark about the cartwheels is not relevant, and that's why it doesn't follow.

On the other hand, a comment can be relevant, but still not follow, for different reasons. The remark may be relevant and connected to what was said before, but the reasoning may be confused.

In the illustrations given below, see if you can pick out those cases where the remarks are relevant but the reasoning is confused, and those where the remarks are just not relevant. There may be other cases you'd want to call "okay," and others that don't seem to fit any of the three columns given:

Note to teacher: In the case of #4, have your students construct a diagram on the board, with vertical lines representing each of the persons referred to.

		Relevant, but confused reasoning	Doesn't follow no connection	Okay	?
1.	Pete: "I knew a man who didn't have a tooth in his head. In spite of that, boy, could he play the drums!"				
2.	Lil: "All pennies are small change and all small change is money. So don't tell me that pennies aren't money!"				
3.	Guy: "What's the moon made of? Well, I'll give you a hint: think of that year-old piece of cheese you found in the freezer."				
4.	Hank: "Big Mary is shorter than Little Ed, and Little Ed is shorter than Tiny Lewis. So obviously Tiny Lewis is shorter than Big Mary."				
5.	Pat: "Cows eat grass and horses eat grass and sheep eat grass, so I guess it follows that all insects eat grass."				
6.	Ned: "In the middle of the concert, someone shouted, 'FIRE'!"				
7.	Tina: "All the time I was telling Nancy the bed-time story, she kept rubbing her eyes."				
8.	Hugo: "My cousin, Fred, arrived at school at 3:00 p.m. Right away everyone got up and went home. They sure don't like Fred!"				
9.	Art: "Of course policemen in London carry billy clubs and here they carry guns. But that has nothing to do with the price of rice in China."				
				Ν	ΛL

EXERCISE: Expressions making use of parts of the body
(p. 10, lines 12-13

We often say things like "the head of the class" or "the foot of the bed." See if you can fill in the following expressions with the body part that is usually mentioned:

1.	The	of the	storm	is its	center.
	mi.	C .1			

- 2. The______ of the column of soldiers is where the column begins.
- 3. They struggled on into the______ of the wind.
- 4. The drivers were in the final of the race.
- 5. The liquid poured out from the of the bottle.
- 6. We drank from the of the cup.
- 7. The searchlight pointed a of light at the sky.
- 8. The toe of his foot fitted snugly into the of his shoe.
- 9. The announcer said to the audience, "Let's give this little girl a great, big!"
- 10. "And now," said the judge, "we come to the central point, the of the matter."

EXERCISE: Vocabulary

(p. 10, lines 8, 17, 25)

Explain the different usages of the words mentioned below:

1. FUNNY (line 8)

- a. Muriel: "I don't laugh because I don't see anything funny about someone slipping on a banana peel."
- b. Nicole: "What I find funny is that I locked my door when I went out, and now, when I come back, it's unlocked."
- c. Glenda: "There's no such thing as a funny; there are only funnies."

2. MAD (line 17)

- a. Julie: "He was mad at us for not inviting him to the party."
- b. Anita: "People who are mad may be helped by treatment."
- c. David: "They called my dog `mad', but he wasn't angry at anyone."
- d. Carol: "I'm just mad about Twinkies."

3. FALL (line 25)

- a. Phil: "I often fall asleep while reading."
- b. Ken: "I once fell off a ladder."
- c. Vic: "As she was leaving the store, her eyes fell on a blue necklace."
- d. Dot: "Once we had crossed the hills, the land fell away."
- e. Judd: "After my foot falls asleep, it begins to tingle."
- f. Jeanne: "Is it really a fact that London Bridge once fell down?"
- g. Len: "I love the way Jeanne's scarf falls over her shoulders."
- h. Ray: "Poor Vic, he has fallen into disgrace."
- i. Joe: "The moment Jeanne saw Vic, her face fell."
- j. Manny: "The moment Ken saw Jeanne, his voice fell."
- k. Sally: "Thanksgiving always falls on a Thursday."

ML

EXERCISE: Reflexiveness

(p. 11, line 4)

Reflexiveness is behavior in which the subject (the one who is doing something) is also the object (the one to whom it is done). If you think about yourself, or dress yourself, or take a shower or bath, you're being reflexive.

Do any of the following resemble a kitten chasing its tail? If it does, in what way does it do so?

		Doesn't Resemble	Resemble	?
1.	A detective looking for someone who turns out to be himself.			
2.	An echo that echoes itself.			
3.	A girl retracing her steps in the snow.			
4.	A boy combing his hair.			
5.	Someone thinking about thinking.			
6.	A boy looking at himself in the mirror.			
7.	A kite flying in circles.			
8.	A doctor taking out his own appendix.			
9.	A person who talks to himself behind his back.			
10.	A person who ask himself questions and then answers them.			
11.	A hound dog following its own scent.			
12.	A sculptor making a sculpture of a sculptor making a sculpture.			
13.	An airplane gunner who shoots the tail off his own airplane.			
14.	A girl who has a part in a play of a girl who has a part in a play.			
15.	Firemen putting out a fire in the firehouse.			
16.	A girl washes her face.			

DISCUSSION PLAN: Seeing problems

(p. 11, line 7)

- 1. When Pixie woke up in the night, she found that her foot had "fallen asleep." Does that mean that the foot stayed asleep when the rest of her body woke up?
- 2. Why did she think the sleepy foot belonged to Miranda?
- 3. Pixie asked Miranda "Do you think that, if my head falls asleep, I'll think it's yours?" What problems did Pixie see when she asked that question? Do you see any other problems?
- 4. Close your eyes. Now count to ten. Open them again. Were you asleep when your eyes were closed? Is there any difference between being asleep and simply having your eyes closed?
- 5. Have you ever heard anyone talk in their sleep? When you talk in your sleep, does that mean that your voice has woken up?
- 6. When you go to sleep, do you still go on breathing? Does that mean that your lungs never go to sleep?

MJW

EXERCISE: Questions and problems

(p. 11, lines 7-9)

Sometimes a sentence is in the form of a question. Sometimes it is not in the form of a question, but indicates that a problem exists. And sometimes a sentence is in the form of a question, and represents a problem as well.

				A	Α		
				question p	oroblem	Both	?
	1.	Fritz:	"The refrigerator has stopped working."				
	2.	Horace:	"If only it were spring!"				
,	3.	Lee:	"Isn't the rain in Spain mainly on the plain?"				
,	4.	Coco:	"If you have any questions, ask me."				
į	5.	Toby:	"All right you guys, what's going on here?"				
	6.	Valerie:	"My parents are both looking for jobs."				
	7.	Spud:	"There's a mouse under the teacher's desk."				
	8.	Trish:	"I don't know what's wrong with me to-day."				
	9.	Sally:	"Am I pretty?"				
	10.	Vic:	"What goes up must come down, I guess."				
							ML

(pp. 11-12)

Judging another person's intentions

When Miranda locks the bathroom door, Pixie infers that Miranda did it just to keep Pixie out of the bathroom. There is no indication that this was Miranda's intention but Pixie takes it personally.

Unfairness as a violation of rights

Pixie objects that Miranda is unfair because she has as much right to use the bathroom as Miranda does. Again, it is not clear that what Miranda has done is unfair and a violation of Pixie's rights. Granted, Pixie has as much right to the bathroom as Miranda does, but they could take equal turns. Fairness does not require that Miranda get out of the bathroom whenever Pixie wants to get in.

Fairness

Nevertheless, Pixie has introduced the notion of fairness. Discuss this notion with your students. Begin by asking them what they think fairness involves. Perhaps the most respected traditional formulation of fairness is that, insofar as people are similar, they should be similarly treated; and insofar as people are relevantly different, they should be differently treated. You may find your students bringing up such conceptions of fairness as taking turns or sharing. Taking turns, as Pixie correctly notes, is one example of equal rights and sharing is an example of equal distribution. Both are instances of fairness.

Rights

On the basis of what Pixie says, it is difficult to determine how she knows that she has as much right to use the bathroom as Miranda does. It is possible that Pixie derives her notion of rights in this instance from the prevailing arrangement in her family (an unwritten social contract, as it were). Or, Pixie may feel that such a right is "natural," although there is no evidence for such an interpretation. Thirdly, Pixie may feel that such a right is logically deducible from the concept of a person. While this particular passage may not support this interpretation, it may have some plausibility based on the picture of Pixie that emerges from the book as a whole.

The paradoxes of pre-adolescence

Pixie takes out her resentment by wishing that Miranda would swallow her toothpaste and in appealing to her to turn the water down because there is a water shortage. The latter is a moral appeal: It is unfair for you to waste water when there is a water shortage. Immature emotional resentment is balanced by commendable appeal to social justice. In the following paragraph, Pixie lectures Miranda on the impropriety of pushing people around and then, in an immature and selfish way, complains that when she's eleven she won't have anyone to push around. As a preadolescent, Pixie seems to be at the age where on one hand, she is still an egocentric child, and on the other hand, she is coming to know society and the necessity of altruism in certain situations.

Judging intentions again

Again, Pixie claims to know Miranda's intention. She claims that Miranda let her in the bathroom because she was finished rather than because she was sorry for Pixie. There is no evidence to sustain Pixie's interpretation.

Corresponding mental acts

When Pixie says, "That's what I hoped she was hoping," she introduces us to the issue of corresponding mental acts. One can have mental acts which are similar to other mental acts of one's own, or one can have mental acts which are similar to the mental acts of other people. An example of the first kind would be my believing that I believe something, and an example of the second kind would be my believing that you believe something.

Identical mental acts

One might consider the possibility of several mental acts being identical with one another. For example, would an individual have two memories which are exactly alike? One answer that has been given to this question is that such a happening could not possibly occur. People remember in sequence. If someone remembers what he had for dinner yesterday and tries a moment later to remember the same thing, the later memory will include the earlier memory but not vice versa. Therefore, the two memories are necessarily different.

EXERCISE: Vocabulary

(p. 11)

1. PROBLEM (line 7)

Explain the differences in the following usages:

- 1. "Geraldine is a problem child."
- 2. "We have 24 problems in math for homework."
- 3. "Is education more of a problem for the teacher or for the student?"
- 4. "Her problem is that she never sees any problems."

2. QUESTION (line 11)

- a. Which of the following sentences are questions?
- 1. "Are we all here?"
- 2. "What was Julius Caesar's first name?"
- 3. "The rain falls alike on the just and the unjust."
- 4. "Oh, how I hate to get up in the morning!"
- 5. "Wouldn't you like to stop now and go out to play?"
- 6. "Today is Monday, isn't it?"
- 7. "Sure I like him, and what if I do?"

b. What different meanings of the word "question" do you find below?

- 1. "He was arrested and questioned by the police."
- 2. "There is a question in my mind as to how to proceed."
- 3. "The king has left the country; whether he will ever return is in question."
- 4. "This crooked little line is a question mark."

3. RIGHT (line 15)

Explain the differences in the following usages:

- 1. "These two lines form a right angle."
- 2. "Under the circumstances, he did the right thing."
- 3. "I asked a simple question, and he gave me the right answer."
- 4. "He didn't answer my knock. I said, `Are you all right?' "
- 5. "The sailboat almost tipped over before we could right it."
- 6. "I don't think he knows his left from his right."
- 7. "It's my right to think for myself and say what I think."
- 8. "The boxer threw a left and then a right."
- 9. "Rover," I said, "you go right home!"
- 10. "The rain went right through my clothes."
- 11. "Everything's a mess, and we must set it right."

4. FAIR (line 15)

Explain the differences among the following usages:

- 1. "The sailors looked forward to fair weather."
- 2. "Some of the members of the class were fair-haired."
- 3. "Then we went to see `My Fair Lady'."
- 4. "The referee was blind, but he was fair."
- 5. "Her performance in spelling was only fair."
- 6. "The umpire said the ball was fair."
- 7. "Don't play favorites; that's only fair."

ML

DISCUSSION PLAN: Sharing (p. 12, lines 1-2)

I. Can two people share the same

- room?
 book?
 pleasures?
 body?
 ideas?
 pet flea?
 - friends? 10. mind?

II.

- Suppose you and your friend are going to share a piece of pie. If you demand a larger share, will that mean your friend's share will have to be smaller?
- 2. Suppose you and your friend are reading in class from the same book. Does it follow that, the more you read, the less your friend will be able to read?
- 3. Can some things be shared only if you each take portions? (Give examples)
- 4. Can some things be shared only if you each take turns? (Give examples)
- 5. Can some things be shared, and yet each person's share be the same as if he or she had the thing all to himself? (Give examples)

ML

EXERCISE: Hoping

(p. 12, line 5)

What is the difference between *hoping* and:

- 1. wishing?
- 6. suspecting?
- 2. believing?
- 7. doubting?
- 3. expecting?
- 8. foretelling?
- 4. awaiting?
- 9. wanting?
- 5. trusting?
- 10. predicting?

DISCUSSION PLAN: Hope

(p. 12, line 5)

In which of the following sentences would you fill in the blank with the word "hope", and in which would you fill in some other word? (What word would you use instead of "hope"?)

1.	"I	there will be a tomorrow."

- 2. "I _____ there will be no more wars."
- 3. "I ______ there is a tooth fairy."
- 4. "I _____ that I will stay in good health."
- 5. "I ______ that more things are possible than I think there are."

DISCUSSION PLAN: Corresponding mental acts

(p. 12, line 5)

Pixie says, "That's what I hoped she was hoping." In other words, Pixie here engages in a mental act that seems to correspond to Miranda's mental act. This discussion plan deals with occasions in which several people engage in the same mental act, or the same person engages in the same act on several different occasions.

- 1. Could I have hope that you have hope?
- 2. Could I wish that you wish?
- 3. Could I dream that you dream?
- 4. Could you hope to have hope?
- 5. Could you wish to have wishes?
- 6. Could you dream that you are dreaming?
- 7. Could I believe that you believe?
- 8. Could I wonder whether you wonder?
- 9. Could I think that you think?
- 10. Could I know that you know?

Episode 5

(p. 12)

Fancying oneself a victim

Pixie claims that everyone picks on her. Oddly enough, she admits In the next breath that they're right. Emotionally, she fancies herself a victim; Intellectually, she sees the justice of the criticisms that are made of her. Another paradox of preadolescence.

Every difference makes a difference

She draws the line, however, In the case of Miranda's criticisms of her. She argues that Miranda blames her for behavior that Is neither right nor wrong. In fact, Pixie pinpoints the criterion she employs to determine the difference between right and wrong when she asks, "What difference does It make whether I put the sugar on first or the milk on first?" In other words, If something is to be called right, It must be shown that Its consequences are different from the consequences of something called wrong. If the consequences are Identical, then there Is no justification whatsoever for judging the two kinds of behavior differently.

Must we always obey all the rules?

An answer that can be given to Pixie (although not necessarily a good answer) Is that when one plays a game one must follow the rules, and It Is Irrelevant to object that some of the rules are stupId. If people want to play the game, they must accept the rules whether they like them or not. In this sense, It could be argued, perhaps by Miranda that custom prescribes various forms of etiquette. One may or may not understand the justification for such etiquette, and Indeed, there may not be any justification. Nevertheless, one should not commit a breach of etiquette on the grounds that the rules make no sense. It Is not difficult to Imagine Pixie replying that the Instances she cited In no case Involve a breach of etiquette.

EXERCISE: What does difference mean?

(p. 12, line 23)

Explain the differences in the following usages:

1. DIFFERENCE

- a. Marion: "What is the difference between 9 and 6?"
- b. Howard: "What is the difference between a cat and a comma?"
- c. Clara: "Howard, you're always arguing with Marion. What's the

difference between you?"

d. Brenda: "Every difference makes a difference."

2. DIFFERENT

- a. Katha: "Clyde, you and I are very different."
- b. Ernest: "We visited many *different* countries."
- c. Clyde: "Let me tell you, Kathy's not like anyone else. She's really

different!"

EXERCISE: What does right mean?

(p. 12, line 20)

Think of another word for the word "right" in the following sentences:

- 1. I told my father that the art class was *right* near the cathedral on South Fullerton Street.
- 2. I have a *right* to express what I think is the truth.
- 3. Is it *right* to stay awake and think about things, when your father has told you to go to sleep?
- 4. My mother told my grandfather to make a *right* at Valley and Broad Roads to get to the public library.
- 5. Susan told me that when she walked into the room, she could sense that something was not *right*.
- 6. When I finished the jam session and walked down into the audience, my daddy said to me, "Right on, son!"
- 7. After a long argument with my sister, I said, "*Right*, you're *right*, and I don't want to talk about it anymore."
- 8. I got my homework back this morning, and the teacher had written at the top of the page, "100% *right*."
- 9. Debra, on entering the room said, "That painting is not *right* on that wall. Somehow, it looks wrong."
- 10. When I am writing a poem, I always have to search a long time to find the *right* word to express what I mean.
- 11. I had a friend who tried to persuade me that sometimes getting expelled from school is *right*. I just could not agree. I think everyone has a *right* to an education, and no one can take it away.
- 12. In math, 4 is always the *right* answer to the question, "How much is 2 and 2?"
- 13. I borrowed the money from Edward, and it wouldn't be *right* not to pay him back.
- 14. The moon is *right* over my garage. I know because I am looking through my binoculars.
- 15. Mary tried to get the line of the nose just *right* when she was drawing Carol's face.
- 16. When you've had a fight with your best friend, sometimes you just don't know what is the *right* thing to do next. Calling her up *right* away seems odd. But not calling her up, just doesn't seem *right* either.

AMS

EXERCISE: What difference does it make?

(p. 12, lines 23-24)

In the following cases, put an "X" in the box under "makes a difference" or "makes no difference" or "?". Then give the reason for your answer.

			Makes a difference	Makes no difference	?
1.	Eating a	donut at breakfast instead of a muffin.			
2.	Not brus	hing one's teeth before going to school.			
3.	Going ice	e skating instead of doing one's homework.			
4.	Van:	"I play with Adam on his jungle gym rather than Glenn who wants to go sledding."			
5.	Sally:	"I chew gum rather than suck on candies when I'm nervous."			
6.	Kim:	"I eat only the vegetables when the meal being served includes red meat."			
7.	Art:	"I like being in the mountains rather than at the seashore."			
8.	Hope:	"I don't like people who are slow in figuring things out."			
9.	Mort:	"I like Christmas but not Thanksgiving."			
10.	Greta:	"I don't mind telling a lie once in a while if I think it will smooth things over."			

AMS

Teacher Self-Evaluation Chapter Two

- 1. Did I begin each session with a short reading from text?
- 2. Do the students understand connections between text and exercises we do?
- 3. Do students understand the concept of possibility?
- 4. Have students gained expertise in identifying simularities and differences?
- 5. Can students verbalize what follows from what they say?
- 6. Are more non-verbal students participating now in class discussions?
- 7. Do students talk to other students?
- 8. Am I asking follow up questions what a student makes a remark?
- 9. Have I encouraged students to give reasons for their views?
- 10. Are students demanding reasons from other students?
- 11. Am I talking too much?
- 12. Do all the students look at me when they answer, or do they look at each other?

CLASSROOM DIALOGUE			
Date	 _		
Topic	 _		

WHAT THE STUDENTS ACCOMPLISHED DOING THIS CHAPTER

Specific Skills Taught

Specific Skills Reenforced

Specific Skills to Work on in the future

EXERCISES IN THIS CHAPTER THAT WORKED

REASON THEY WORKED

STUDENT EVALUATION

Students who talked to me many times while doing this chapter.

Students who directed remarks to other students many times while doing this chapter.

Students who are regularly giving reasons for their views during discussions.

Students who were very silent during classroom discussions.

Students who are not giving reasons for views they express

Students who need work on directing their comments to other students rather than to me.	
Students who need work on drawing correct inferences in classroom discussions.	
Students who might be inhibiting others from talking during classroom discussions.	
Students who need teacher encouragement to elaborate on their ideas, especially in terms of what follows from what they say.	
Students who need extra help on one of the thinking skills covered in this chapter.	skill skill skill skill skill skill skill

CHANGES I WOULD MAKE NEXT TIME I DO THIS CHAPTER

CORRELATED EXERCISES I WOULD USE

OVERLAPPING THEMES FROM THIS CHAPTER WHICH OCCUR IN OTHER DISCIPLINES I TEACH

OTHER

DANCE EXERCISES

CHAPTER THREE

Episode I

(p. 14)

Reading faces and body language

Earlier in Chapter One, Pixie made an unsuccessful attempt to talk to Brian. Now she watches Willa Mae sit down with Brian and wonders why he doesn't respond to Willa Mae verbally. However, Brian does pay attention to Willa Mae's face while, when Pixie tried to talk to him earlier, he just looked away.

Brian's behavior raises the issue of what people do when they listen *attentively*. Can an individual better understand what people are saying to him, if he watches their eyes and mouths? Is part of the meaning of a person's utterance contained in the facial expressions and gestures he uses, in addition to words? If this is so, is it possible to read a person's face, the way one reads a book? Furthermore, if a person says one thing, but that person's facial expression or body language suggests another, how is the meaning of the overall behavior to be interpreted?

Pixie now wonders why anyone would stop talking and admits that she finds silence unimaginable.

Wondering, imagining, and Pixie's credibility

There are two mental acts here which are of interest: On the one hand, Pixie says she "couldn't help *wondering*". On the other hand, she claims that being silent is something she "can't even *imagine*. "These observations are set in the context of nonstop talking. In such a context, she admits to having very little control in regard to certain aspects of her mental behavior: namely, her wondering and her capacity to imagine or not imagine. Raise the question with your students. Is it possible that Pixie is not telling the truth here? She says that she never stops talking. Is that literally true? She says she couldn't help wondering. Is that literally true? She says that she couldn't imagine anyone being silent. Is that literally true?

Silence

Ask your students just what silence is. One way to approach the problem is to see silence as analogous to cold and darkness. As cold is the absence of heat, and darkness is the absence of light, so silence could be the absence of sound. Ask your students whether this analogy is or is not a good one.

Why do people talk?

Pixie asks Isabel, "Why do people talk?" This question is ambiguous. It could mean what causes people to talk? Or it could mean what reason do people have for talking? If, for example, someone were to flash a bright light in your eye, and you blink, it would be customary to say that the light was the cause of the blinking. The blinking was merely a reflex reaction, over which one has no control. But if people choose to talk, then presumably they have a reason for doing so. Isabel's interpretation is the latter. People choose to talk in order to let other people know what they think and feel. In other words, Isabel's interpretation is that people talk in order to express themselves and to communicate with others. In this interpretation, a person not wishing to express himself and communicate with others could be expected to stop talking.

How are talking and thinking related?

Isabel's way of putting the matter is certainly open to question. Do people think first and then talk? Are talking and thinking concurrent but independent activities, or are they two different aspects of the same thing, just as a coin looks round when viewed from one direction and narrow when viewed from another?

Supposing and falsifying

In line 16, Pixie refers to *supposing*, another mental act. It is a mental act that is of particular importance when one wants to call attention to the possibility of a counter-example. For instance, a toy salesman shows parents a toy. He winds it up, puts it on the counter, and it works perfectly. The child says, "But Dad, suppose it doesn't work on the floor." Here the child is thinking of a possible counter-example. This is a very useful device in philosophical discussions because it forces the thinker to take into account the limits of his concepts. In this sense, *falsifiability*, is of more significance than *verifiability*. The salesman's claim that the toy is good can be verified by his placing it on hundreds of smooth surfaces, but the child's fear that the toy is no good requires a single counter-instance by means of which the salesman's claim can be falsified.

Hypothetical reasoning

Finally, note the pattern of reasoning engaged in by Pixie and Isabel. Isabel begins with a statement of the form "if ... then ..." Pixie replies by denying the second half of Isabel's sentence. Isabel then draws the inference that if

the second half of her initial statement is false, the first half must also likewise be false. Thus,

If I talk, then I want to let other people know what I think and feel. I don't want to let other people know what I think and feel.

Therefore, I don't talk.

As it happens, the inference they draw is valid. It is an example of how formal reasoning is embedded in everyday conversation. However, there need be no examination of the logical patterns involved at this point. This can be done in a later Philosophy for Children program.

DISCUSSION PLAN: Can Ann help?

(p. 14, line 7)

Can Ann help what she is thinking?

		Can help	Can't help
1.	Ann dreams of hitting her brother		
2.	Ann wants to hit her brother		
3.	Ann wishes she were old enough to tell her brother what to do.		
4.	Ann has a scary dream that her brother was hit by a car.		
5.	Ann hopes her brother doesn't want to see Star Wars again.		
6.	Ann pretends to be a princess.		
7.	Ann hopes to get better grades in school.		
8.	Ann decides to keep her room cleaner.		
9.	Ann decides she'll never do dishes again.		
			MW

DISCUSSION PLAN:

(p. 14, line 8)

What do we do all of the time?

1. Breathe?

5. Grow older?

2. Think?

6. Get smarter?

3. Digest food?

7. Hear things?

4. Want things?

8. Feel things?

MW

EXERCISE: Imagine, wonder, suppose

(p. 14; lines 7, 8, 16)

- A. To *suppose* is to consider a possibility as if it were a fact. Example: "Suppose people no longer needed food in order to live."
- B. To *wonder* is to be puzzled over something mysterious, or lacking in explanation.
 - Example: "I wonder why my parents are so late in picking me up today."
- C. To *imagine* is to envision—to consider how things would appear if they were to happen.

Example: "I can clearly imagine a unicorn, even though unicorns don't exist."

Which word, of the three listed above, would go best in the following sentences? (More than one word may fit a given space; still, one of the alternatives might be better than another.)

1.	Lauren:	"I there are lots of people in the world who where their next meal is coming from."	
2.	Frieda:	" the world were suddenly to stop turning. I can't even what would happen next."	
3.	Bert:	"I why grass is green and the sky is blue. Do you there's a reason?"	
4.	Carmen:	"You don't anyone in this room is a Vulcan, do you?"	
5.	Griff:	"I learned the English language while I was still a baby. I how I ever did it!"	
6.	Hector:	"To make believe is more than merely to"	
		M	L

DISCUSSION PLAN: Contrasts

(p. 14, lines 7-9)

- 1. Do we have to be sad sometimes in order to be happy at other times?
- 2. Could the whole world be red?
- 3. Could everyone be tall?
- 4. Do you have to make mistakes in arithmetic to do better?
- 5. Do some people have to suffer so that others can see how lucky they are?
- 6. Can everyone be rich?
- 7. Could everyone always lie?

DISCUSSION PLAN: Silence

(p. 14, line 9)

- 1. Would it be correct to say that silence is to sound as dark is to light?
- 2. Would it be correct to say that silence is to sound as cold is to heat?
- 3. Would it be correct to say that silence is to sound as a background is to a picture?
- 4. Do pictures tell us something, even though they are "silent"?
- 5. Do the words "sound" and "noise" mean the same thing?
- 6. Do the words "silence," "stillness," and "quietness" mean the same thing?
- 7. Do the words "silence" and "peace" mean the same things?
- 8. Could a person want to speak and yet remain silent?
- 9. Could a person want to remain silent, and yet speak?
- 10. Are silences sometimes spooky?
- 11. Are silences sometimes eloquent?
- 12. Can a silence be full of hate?
- 13. Can a silence be full of love?
- 14. Can a silence be beautiful?
- 15. Is a silence something or nothing?

ML

DISCUSSION PLAN:

(p. 14, lines 10-17)

Can people help what they feel and do?

		Can help	Can't help
1.	It is only 11:00 A.M. and Lesley is really hungry.		
2.	Jill wants to stop biting her nails.		
3.	May wishes she could be nicer to her grandmother.		
4.	John hopes to be the best in arithmetic next year.		
5.	Jimmy has a sneezing attack and disrupts the class.		
6.	Sam spends all afternoon playing with his new electric football game.		
7.	Susan hiccups loudly while answering the questions in class.		
8.	Ralph decides to sit up straight whenever he is in class.		
9.	Amy wishes she could speak Spanish to her new neighbor.		
10.	Judy hopes that her teeth will grow in less crooked.		
			MW

DISCUSSION PLAN: Talking and communication

(p. 14, line 11)

- 1. Can animals talk?
- 2. Can a baby tell you what it wants?
- 3. Do people who speak a foreign language think the same as we do?
- 4. Can you talk to your friend in class when there is "no talking allowed"?
- 5. Do you talk the same way to everybody?
- 6. Is it easier to talk to your best friend than to your other classmates?

MW

DISCUSSION PLAN:

(p. 14, lines 11-15)

Can you tell why the following children act the way they do?

- 1. Joe does not have his homework done and he is sitting with his head down at his desk.
- 2. Only 3 children come to Mary's birthday party and she won't play any of the games.
- 3. Peter plays truant from school.
- 4. Bob's mother comes home from work with a headache and makes Bob clean his room.
- 5. Jim's father's boss comes over, and his father sends him out to play.
- 6. Jim sees the movie Bambi, and walks out of the theater crying.
- 7. Tim gets knocked over playing kickball and starts a fight.

MW

DISCUSSION PLAN: Private feelings.

(p. 14, line 17)

- 1. Does anyone know your feelings better than you do?
- 2. How do you know what you think and fee!?
- 3. How do you know what others think and feel?
- 4. Would you like to know what another child thinks and feels?
- 5. Can you know what an animal thinks and feels?
- 6. Should an author tell the private feelings of a character in his story?

Episode 2

(p. 15)

Jumping to conclusions

Pixie begins this episode by putting down Tommy with her "of course," as if anyone who had any brains would have his mystery creature picked out already. Secondly, she draws the wrong inference from what he asked her. She jumps to the conclusion that he is asking her to reveal her mystery creature, and he is not.

Asking a classmate for assistance

He is asking her to give him a suggestion. He says, in effect: I'm not asking you to tell me what your mystery creature is, nor am I asking you to tell me what I should choose as a mystery creature. All I am asking for are some suggestions I could consider as possibilities.

At this point, Pixie decides to tease him by suggesting a unicorn. The contrast between his wellintentioned request for help (note that he asks a fellow-student and not the teacher) and Pixie's maliciously contrived trap is apparent.

The plausibility of unicorns

The suggestion that Pixie makes is of the unicorn, a make-believe creature which, nevertheless, has considerable plausibility. Unicorns are plausible, even though no one has ever found a trace of one, because people think they know enough about them to be able to offer definitions of them, just as Pixie does in this instance.

Unicorns are plausible too because our .mythology contains much that is descriptive of them. For example, it was believed that a unicorn could purify a pond by dipping his horn in it-an ability that would certainly make unicorns useful today. Unicorns in all their gentleness and beauty have been thought of as sacred by many people.

Pixie's definition

It would be worthwhile to considerjust how Pixie defines a unicorn. She says it's like a horse, but it has a long, pointy horn coming out of the middle of its forehead. In other words, her definition involves (1) a simile (unicorns

are like horses), (2) a differentiating feature (except that it has a horn coming out of the middle of its head). A very respectable way of defining a term is first to find the genus to which it belongs and then to find the differentiating feature which distinguishes it from all other instances of that genus.

Definition and existence

A less obvious aspect of Pixie's mischief in this instance is that people tend to think that if something can be defined, it must exist, and if something can be defined and visualized, it certainly must exist. In the latter case, its claim to exist seems to be very strong, but in fact, this is not the case.

Meaning and truth

The case of the unicorn underscores the distinction between meaning and truth. Many mythological creatures are meaningful as symbols because people can visualize them readily, may value them greatly, or have rich associations with regard to them. Such creatures can be powerfully significant in a given culture, but their symbolic significance has nothing to do with the truth of statements about their existence. Unicorns do not exist. This is a truth. But it does not follow at all that the notion of the unicorn is therefore a meaningless notion. Symbolic meanings play a powerful role in human experience.

DISCUSSION PLAN:

(p. 15, lines 7-9)

- 1. What kinds of animals are in the zoo?
- 2. Why aren't dogs in zoos?
- 3. Why is it good for people to have zoos?
- 4. Is it good for animals to be in zoos?
- 5. Is it better for animals to be in the zoo or in a natural habitat?
- 6. Should animals be kept in cages?
- 7. Should animals be allowed to fight each other in zoos?
- 8. Should we teach animals things in zoos?

DISCUSSION PLAN: Accepting help and asking for help (p. 15, line 8)

Who should you help? Who should you accept help from?

- 1. Should you help a classmate think up a topic for a paper?
- 2. Should you let someone copy your homework?
- 3. Should you let someone see the paper you're working on?
- 4. Should you explain how to do a paper to a kid in your class?
- 5. If your best friend wants to copy from your paper, should you let her?
- 6. Your grandmother has given you 6 photos for a term paper, and you need only 4. Should you give the other two to your friends?
- 7. You have to collect news articles from the paper and your mother gives you 10.
- 8. Your aunt gets 100 orders for school candy from the office in which she works.

ML

DISCUSSION PLAN: Being mean and exact comparisons (p. 15, line 10)

- 1. Is it mean to get 100% on a spelling test?
- 2. Is it mean for the teacher to put the class test papers up on the walls, even the ones that fail?
- 3. Is it mean to pick the best singer in the class to sing in the auditorium?
- 4. Is it mean to tease kids for being short?
- 5. You get the best electronic game for Christmas; is it mean not to let the other kids play with it?
- 6. Is it mean to send a child to the principal for very bad behavior in class?
- 7. Is it mean to tell someone's mother if that person hit you?

MW

DISCUSSION PLAN: Getting even

(p. 15, lines 11-12)

- 1. If your friend borrows a dollar and returns it, are you even?
- 2. If your friend tells on you, and you stopped talking to him, are you even?
- 3. If your mother spanks you, and you spank your children when you are older, are you getting even?
- 4. If your friend is nasty to you, and later gets hit by a bike, are you even?
- 5. If your father scolds you, and you don't give him a telephone message, are you even?

MW

DISCUSSION PLAN: What's real?

(p. 15, line 23)

- 1. Dinosaurs
- 2. Frankenstein
- 3. Hairless dogs
- 4. Electric eels
- 5. Tom Sawyer
- 6. Starsky and Hutch
- 7. People's thoughts
- 8. The Revolutionary War
- 9. The year 2000
- 10. UFO's

EXERCISE: Definition

(p. 15, lines 17-18)

Pixie says that a unicorn "is like a horse, but has a long pointy horn coming out of its forehead."

In saying that the unicorn is "like a horse," she is trying to suggest a class of things to which it might belong—something more familiar then "the class of imaginary animals."

In referring to the unicorn's horn, she is speaking about a feature which would definitely make unicorns different from other members of the class of horses.

So, these are two characteristics of a rough attempt to define a noun:

- (1) find a familiar class of things to which the item in question belongs, and
- (2) specify how this particular item is different from other members of the class.

I. Suppose you're asked to define:

"It's like a regular chair, only it has _____ rocking chair "It's like a bicycle, only that ______. motorcycle "It's like a river, only that ." stream "They're like trousers, only that _____." ieans "It's like a book, only that tablet "It's like a , only that it's used for writing instead of eating." desk "It's like a ______, but much larger." tree "It's like a ______, but it fits almost to the knee." boot "It was like a _____, but very shaggy." mammoth

II. Now, provide your own definitions for the following:

You could say:

ML

Episode 3 (pp. 16 and 17)

Thinking as tracing out the relationships of an experience

In this episode, Pixie reflects on an immediate experience, a practice she has not previously engaged in to this degree. Pixie thinks to herself: What causes my teeth to come out, and what will happen if they all come out and aren't replaced with new ones? In thus reflecting upon her present puzzling experience, tracing it back to its causes, and looking ahead to its consequences, Pixie is engaged in a paradigm of thinking.

Thinking starts with a felt difficulty

Notice that earlier Pixie had been thinking about the zoo trip and then was interrupted by the realization that several of her teeth were loose. There is a difficulty she feels for the first time, and she wonders, apparently for the first time, what if no new teeth come in. Her father's answer causes her more problems, as she considers herself nine years old with false teeth. (You could ask your students to draw pictures of themselves with false teeth looking in the mirror.)

Personification of things

Pixie asks her father, "Daddy, how does a tooth know when to come out?" Pixie seems to be attributing human reasoning to things, a common enough mistake. Her animistic projection of human characteristics to the physical world is part of the child's tendency to see and portray the world physiognomically.

Analogical reasoning

Pixie offers a plausible answer to her question "What if I don't get new teeth?" Why can't the seeds of teeth be planted, the way the seeds of trees are, instead of putting in false teeth? In this instance, Pixie is reasoning analogically. Trees have roots and people plant them. Teeth have roots, could they be planted also? The analogy is very plausible.

Is Pixie's father incoherent?

At this point, Pixie's father, who seems to be ready to go back to sleep, starts talking about lizards and Pixie observes that his remarks are inconsistent if not totally incoherent. She just doesn't see what lizards' tails have to do with teeth.

ML

DISCUSSION PLAN: On having two sets of teeth

(p. 16, lines i0-15)

- Can you think of any creatures besides humans that have two sets of teeth?
- Can some humans have more than two sets of teeth?
- Since we're only going to lose our first set of teeth, why should we bother to have them?
- 4. Is there any difference between baby teeth and permanent teeth, other than that one set comes before the other?
- 5. If something happens later in a person's life, is it therefore better than similar things that happen earlier?
- 6. Is it true that, if an alligator loses a tooth, a new tooth will always grow in to replace the old one?

ML

DISCUSSION PLAN: When is something *false*?

(p. 16, line 17)

- 1. If a person has an artificial eye, do we cal! it a "false" eye?
- If a person has artificial teeth, do we say he has "false" teeth?
- Can you think of any circumstances under which you might call the front of a building false?
- 4. Can you think of any circumstances under which you might call a vegetable false?
- Can words be false?
- Can questions be false?
- Can exclamations be false?
- Can sentences be false?
- Is there any difference between being false and being wrong?
- 10. Is there any difference between being false and being incorrect?
- 11. Is a false friend an unfaithful friend?
- 12. Is there anything false about wearing eyeglasses?
- 13. Is there anything false about wearing a wig?
- 14. Is a mask a false face?
- 15. If a person is carrying a stolen driver's license, does that make it a false driver's license?

DISCUSSION PLAN: Are false teeth really false?

(p. 16, line 17)

When the words true or false are found in a sentence on the left, look for the word (or words) in the right hand column that is closest in meaning to the way the word is used in the sentence. In other words, look for a synonym. (Two words with the same meaning are synonyms for one another.)

1.	John: "Mary, I'll always be true to you!"	reliable
2.	The arrow flew true to the mark.	perfect
3.	Ruth: "These are true copies of my letter!"	sound
4.	Len: "Please answer with a true statement."	faithful
5.	The police were given a false report.	accurately
6.	Jim: It's true that I tell lies."	correct
7.	Mary's grandfather wears false teeth.	wrong
8.	Selma: "All right, this will be my true confession."	incorrect
9.	Art: "If a statement is based on fact, I say it's true."	unfounded
10.	Hal: "These rumors are false, because they're not based on fact."	well-founded
		accurate
		genuine
		artificial
		honest

DISCUSSION PLAN: Can things have thoughts and feelings

(p. 16, line 20)

- 1. Pixie asks how a tooth "knows when to come out". Is this just a figure of speech on her part, or does she really believe that the tooth thinks?
- 2. Does the ice melt in the spring because it "knows when to melt?"
- 3. Do your feet know the way home?
- 4. When a lost dog finds its way home, is that because it knew the way?
- 5. If someone says that "the sky is threatening," does this mean the sky is using threatening language?
- 6. Does the sky look the way people look who use threatening language?
- 7. If someone says that "the daffodils .are gleeful," does this mean that the daffodils are laughing merrily?
- 8. Do the daffodils look and act the way gleeful people look and act?
- 9. If someone says, "the music is sad," does this mean that the orchestra is making sounds that have unhappy feelings?
- 10. Are the sounds arranged the way your feelings and thoughts are arranged during those tunes when you feel sad?

ML

EXERCISE: Dreams and dreaming

(p. 17, line 19)

Complete the following analogies; point out any you think don't work.

I. Dreams are to dreaming as

1.	thoughts are to
2.	questions are to
3.	answers are to
4.	memories are to
5.	shivers are to
6.	hopes are to
7.	doubts are to
8.	breath is to
9.	coughs are to
10.	howls are to
	Sleeping is to waking as
1.	night is to
2.	winter is to
3.	death is to
4.	ignorance is to

5. beauty is to

EXERCISE: What the word "mind" means

(p. 17, line 25)

Discuss the following expressions; what is meant in each case?

Part I.

- A. "He has a closed mind."
- B. "He has an open mind."
- C. "He's of two minds."
- D. "I'll keep it in mind."
- E. "She'll speak her mind."
- F. "They were a!! of one mind."
- G. "I know my own mind."
- H. "She has a mind of her own."
- I. "He has a lot on his mind."
- J. "My mind is set."
- K. "Pay him no mind."
- L. "He has a mind for business."
- M. "That puts me in mind of something else."

Part II.

- A. "I don't mind if I do."
- B. "Mind your manners!"
- C. "Would you please mind my shopping cart?"
- D. "Mind your own business!"
- E. "Never mind!"

Part III.

What is the difference between the way the word "mind" is used in Part I and Part II, above?

ML

Episode 4 (pp. 18-19-20)

Pixie's mischief in the elevator

You could begin this episode by asking your students why they think Pixie says at the end of the first paragraph, "I don't think I'll do that anymore," with regard to pressing the elevator buttons in Isabel's apartment house.

Counting the same individuals twice over: Connie fails to distinguish between the way things are referred to when they are considered individually (distributively) and the way they are referred to when they are seen as a group (collectively). Connie's mistake is that she fails to see the distinction and as a result counts the same group of people twice over. She talks about her aunts, uncles, cousins, and so on, and then talks about her family as if the family were in addition to the people she has just named.

Category-mistakes

Connie's mistake is usually called a "categorymistake." Suppose a person says that she has just had a medical check-up and she was told that all parts of her body were working well, and *in addition*, she has a "good constitution." But does one have "a constitution" *in addition* to the assembly of one's bodily functions? It's rather like saying that you bought rice, milk and cocoa in the store, and *in addition*, bought groceries. The groceries aren't a separate category: rice, milk, and cocoa are groceries.

Relatives and families

Isabel and Pixie try to explain the matter to Connie but she remains rather puzzled. They explain to her that families are made up of relatives, and each family contains a different set of relatives. As a result, no two families are alike. Suppose there are identical twins, named John and Mary. Do they have the same families? No. John is a relative of Mary's, but he's not a relative of himself. Likewise, Mary is a relative of John, but she is not a relative of herself.

Families as systems of relationships

The nature of familial relationships is suggested to Connie in line 14. Connie infers that although different families contain different individual members, families resemble one another as systems of relationships.

Family relationships and military relationships:

Perhaps what Connie means can be illustrated by using yet another analogy. Consider two armies, say, the British and the American. Obviously, they contain different soldiers, but they might be structurally similar, in that the relationships of noncommissioned officers to officers and of the various ranks to one another, are similar in both armies.

Family relationships and analogies

There is a similarity between analogies and family relationships. An analogy suggests that there is a resemblance between two relationships; kittens are to cats as puppies are to dogs. In the same way, a brother-sister relationship in one family is similar to a brother-sister relationship in any other family, even though the individual people are different.

The limits of analogical reasoning

When the terms are filled in with real individuals, the comparisons become much more problematic. A specific kitten may behave towards its parents very differently from the way that a specific puppy behaves towards its parents. Likewise, the relationship between the brother-sister combination of Hansel and Gretel is a very different relationship from the relationship between a brother and sister who are constantly engaged in squabbling.

Does Connie understand?

It would be a good idea if you asked your students what they think Connie's last statement means. If they tell you that obviously all of Isabel's and Pixie's explanations haven't helped Connie very well, then you know that your students see the point. If they can't tell you this, then you know that they also are probably finding the content of this episode still unclear.

DISCUSSION PLAN: Having brothers, sisters and other relatives (pp. 16,17, lines 6-7)

Answer each question and give a reason.

- 1. Is it better to be the oldest, the youngest, or somewhere in between?
- 2. Is it better to have only brothers, or only sisters, or some of each?
- 3. Is it better to be one of twins or one of triplets?
- 4. Is it better to be an only child and have no brothers and sisters at all?
- 5. Is it possible for your mother to have a brother or sister younger than you?
- 6. Could a year-old baby be someone's uncle?
- 7. Is it possible for children to be older than their parents?
- 8. Is it possible that each person has a secret twin somewhere in the world?
- 9. If your parents had no children, does that mean you won't have any?
- 10. If a man were to marry his aunt, would he become his own uncle?

ML

EXERCISE: Holidays

(p. 18, line 10)

In the space to the right, tell why each item is a holiday.

- 1. Thanksgiving
- 2. Valentine's Day
- 3. Mother's Day
- 4. Christmas
- 5. Hannukah
- 6. Easter
- 7. Columbus Day
- 8. St. Patrick's Day
- 9. Memorial Day
- 11. Father's Day
- 12. Veterans Day
- 13. Independence Day

AMS

EXERCISE: Family	(p. 18, line 14
	Ur · -,

I. Indicate with a check whether the following are families, or members of families.

		Family	Member of Family	?
1.	A litter			
2.	A den			
3.	An aunt			
4.	A school			
5.	The Washingtons			
6.	A child			
	Below list five members of a family. (For	example, a mo	ther.)	
1.				·
2.				·
3.				·
4.				
5.				
			A	AMS

DISCUSSION PLAN: Understanding

(p. 18, line 24)

- 1. What does it mean to say that someone *understands* the game of marbles?
- 2. If you understand your best friend, what does that mean?
- 3. Is *understanding* your best friend different from *understanding* the game of marbles?
- 4. If you understand your arithmetic homework, what does that mean?
- 5. Is *understanding* an arithmetic problem the same thing as *understanding* your dog?
- 6. If you understand your dog, what does that mean?
- 7. If you *understand* a poem, what does that mean?
- 8. Do you understand a poem in the same way you understand your dog?
- 9. If you *understand* your grandmother, what does that mean?
- 10. Do you *understand* your grandfather in the same way that you *understand* your grandmother?
- 11. Do you understand football?
- 12. Do you *understand* the meaning of Christmas the same way that you *understand* baseball?
- 13. Do you understand yourself? How?
- 14. Do you understand why you do the things you do?
- 15. Do you *understand* yourself in the same way that you *understand* your father?

AMS

EXERCISE: Inferring family relationships

(p. 19, lines 25-26)

- 1. If Mary is the sister of Alex, is Alex the sister of Mary?
- 2. If Carl is the older brother of Gwen, is Gwen the older sister of Carl?
- 3. If Debbie is Frank's niece, is Frank Debbie's uncle?
- 4. If Toby is Edgar's cousin, is Edgar Toby's cousin?
- 5. If some of your cousins are boys, does that mean that
 - a. all of your cousins are boys?
 - b. some of your cousins are girls?
 - c. none of your cousins are girls?
 - d. none of the above?
- 6. There are two brothers, Mike and Luke Jones. Each has a sister. Does that mean there are two brothers and two sisters in the family?
- 7. If you are your mother's oldest daughter, must your sister be your mother's youngest daughter?
- 8. If you are an only child, does that mean that your father's father is your only grandfather?
- 9. If you are the youngest of 20 children, does that mean that you have sisters?
- 10. Are your grandmothers related to one another?

ML

DISCUSSION PLAN: Category mistakes (and others) (p. 20, lines 12-13)

Is anything wrong with the following?

1. Rachel: "I heard a noise in the night and went to see what it was, but

I was still half asleep."
"Which half stayed in bed?"

2. Sarah: "What did you take when you went to camp?"

Tina: "I took my sneakers, toothbrush, three T-shirts, and my

summer vacation."

3. Sarah: "How long were you at camp?"

Tina: "About three weeks and four feet."

4. Richard: "The table was standing on four legs, so I moved it and stood

it on the floor."

5. Gaby: "My brother loves playing. He plays tiddlywinks, football,

checkers, and lots of other things. But when he plays the

piano he never wins."

Note for teachers:

Steven:

The above statements sound strange because in each case a common word is being used in two different ways at once, and as a result, the ideas and things they are linked to don't seem to fit with each other.

In No. 1, for instance, the word "half" is used to refer to a condition (being asleep) and also in a simple physical sense (half of the body).

And in No. 4, "standing on four legs" tells you that the table stands by means of its four legs, whereas "on the floor" simply means *on top of* or *supported by*. If the children are amused or puzzled by the statements, ask them whether they can explain what it is that makes them sound funny.

MJW

EXERCISE: Reasoning problems for analysis

Very often, a joke is produced by misleading the reader or listener into expecting one line of reasoning, and then revealing that there is another, very surprising line of reasoning which is equally plausible.

ML

Another thing readers find funny is for the joke to begin on a plausible, commonsense level, and then switch to absurdity, or to the commission of a logical fallacy. Implicit in many jokes is the suggestion that someone is considerably more intelligent—or less intelligent—than one might have expected. We are surprised particularly when someone points out differences or resemblances where we had not thought they existed. We laugh at the freshness of interpretation and the originality of the comment involved. On the other hand, when someone fails to note what we think is an obvious difference or similarity, we are inclined to snicker condescendingly at that person's "stupidity."

In the following cases, some jokes are given, with some questions that may be helpful in focusing your analysis of the joke in question.

1. Melba: "In our class, half the kids work and the other half sleep."

Toni: "Gee, that's funny. In our class, it's just the reverse."

Is Toni saying the same thing as Melba, while thinking she's saying the opposite?

2. Marie: "What makes people laugh?"

Dave: "Anything funny."
Marie: "What's funny?"

Dave: "Anything that makes people laugh."

Do you see any connection between Dave's first answer and his second?

3. (on phone)

Kate: "Doctor, this kid I've been babysitting has just swallowed my pen!"

Doctor: "I'll be right there! What will you do in the meantime?"

Kate: "I guess I'll have to write with a pencil."

Is the question "What will you do?" ambiguous? If so, what are the alternative ways it could be interpreted?

4. Scott: "I'd like a whole pizza pie, please."

Counter attendant: "Should I cut it into six parts or eight?"

Scott: "Oh, six. I could never eat eight!"

Is this a case where Scott sees a difference where we see none?

5. Teacher: "You look very familiar. Did you have a twin brother who was in my class last year?"

Student: "No, sir. You didn't pass me last year, so I have to repeat the year."

Teacher: "Hmmm. Remarkable resemblance!"

Can a person resemble himself?

EXERCISE: Begin this story

The following is a story-ending. What it lacks is a beginning. That's what you are to provide:

Suddenly the pilot announced, "It's all right, everyone! We've been able to get the landing-gear down, and now we'll be able to land safely!"

A few minutes later, the huge aircraft settled down on the airport runway, and before long, Lucy and Walt were telling their parents about the exciting trip they'd had.

"My!" said Mrs. Gordon. "For a while I was afraid you'd have to make a belly-flop landing!"

"Oh, mom," Lucy laughed, "we only do that when we're sledding!"

Teacher Self-Evaluation Chapter Three

- 1. Do I know what each student thinks of Brian?
- 2. Can my students identify 10 mental acts they engage in every day?
- 3. Do each of my students understand family relationships?
- 4. Have I done a number of classification exercises with the students?
- 5. Have I given the students an opportunity to discuss friendship either in relation to the IsabelPixie relationship or other students in the novel?
- 6. Do students seem to be listening to each other more carefully in discussions?
- 7. Do students seem to be building on what each other says?
- 8. Can students express comparisons in an exact manner?
- 9. Does a sense of community seem to be developing in the classroom?
- 10. Am I consciously trying to involve more nonverbal students in discussion in non-threatening ways?
- 11. Did I give students ample time to discuss "What is Real," "What is Mind?"
- 12. Am I talking too much during the discussions?

CLASSROOM DIALOGUE						
Date		_				
Topic		_				

WHAT THE STUDENTS ACCOMPLISHED DOING THIS CHAPTER

Specific Skills Taught

Specific Skills Reenforced

Specific Skills to Work on in the future

EXERCISES IN THIS CHAPTER THAT WORKED

REASON THEY WORKED

STUDENT EVALUATION

Students who talked to me many times while doing this chapter.

Students who directed remarks to other students many times while doing this chapter.

Students who are regularly giving reasons for their views during discussions.

Students who were very silent during classroom discussions.

Students who are not giving reasons for views they express

Students who need work on directing	
their comments to other students rather than to me.	
	·
Students who need work on drawing correct inferences in classroom	
discussions.	
	·
Students who might be inhibiting	
others from talking during classroom discussions.	
discussions.	
Students who need teacher	
encouragement to elaborate on their	
ideas, especially in terms of what follows from what they say.	
Tonows from what they say.	
	1 :11
Students who need extra help on one of the thinking skills covered	skill skill
in this chapter.	skill
	skill
	skill

CHANGES I WOULD MAKE NEXT TIME I DO THIS CHAPTER

CORRELATED EXERCISES I WOULD USE

DANCE EXERCISES

OTHER

Chapter Three

OVERLAPPING THEMES FROM THIS CHAPTER WHICH OCCUR IN OTHER DISCIPLINES I TEACH

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CHAPTER FOUR

Episode I

(pp. 21-24)

Pixie's complexity

Pixie portrays herself as a fairly complex person. Many of the things she relates about herself are not flattering. However, she also has many abilities and endearing qualities, which she reveals through her actions rather than her words.

The philosophical analysis of experience

Another characteristic of Pixie's is her propensity to recount incidents which on the surface appear fairly simple or trivial but actually have unsuspected philosophical depths, which are revealed in the telling. An example is in this first episode in Chapter Four. The episode begins with a quarrel at the breakfast table, proceeds to a noisy exchange of accusations about an incident that happened long ago, moves on to an analysis of family relationships, and ends with the question of what relationships are. At this point, a move is made to demonstrate the existence of family relationships by pointing to family resemblances. The episode concludes by touching on two serious philosophical concepts:the notion of reality and the distinction between right and wrong.

Provocative behavior

The quarrel at the breakfast table begins with Pixie's staring at Miranda who is trying to eat. There is a question as to whether Pixie's behavior is deliberately provocative, although it is clear enough that it is provocative, because Miranda responds with a kick. Then Pixie claims that Miranda started the fight and that she (Pixie) was not doing anything.

Do we do anything when we stare?

Pixie claims that staring is not doing anything. In other words, it is not an act. Her reasoning is interesting. She maintains that staring does not fall into the category of "acts which do anything." Presumably she means acts which have an effect. However, her claim to innocence is not altogether plausible.

Is Pixie deceitful?

The reader cannot help suspecting that Pixie stared at Miranda with the intention of provoking Miranda into retaliation and possibly with the further hope that Miranda's retaliation would cause her to be scolded by their mother. This interpretation attributes mean and deceitful motives to Pixie, but note Pixie's own comment to the effect that even after she felt better, she kept right on hollering.

Making others uncomfortable

Pixie claims that her staring at Miranda was innocent and did no harm. This contention is open to dispute. A person who is looked at as though he were a bug under a magnifying glass is likely to feel more than a bit disconcerted. In such a situation, people feel as if they were the helpless victims of an aggressive act that could turn them into mere things.

Feigning and make-believe

Pixie feigns being hurt. Talk with the students about the difference between feigning (pretending) and "making believe." Are they the same thing? Your objective in such a discussion is to elicit from the students a recognition of the difference between make-believe, which is playful, fictional, and innocuous, as contrasted with pretense which is engaged in for deliberately deceitful purposes. Make-believe generally does not raise moral issues in the way that feigning does. Investigating the Incident:

Pixie's mother decides that the situation is worth investigating, and begins to question Pixie, who at first is quite defensive. Her mother pursues the questioning by asking if it was something Miranda did to Pixie that caused Pixie to be so aggressive. Note that the mother's question has become much more specific and capable of being answered. The question is no longer the vague, "Why?" but the much more pointed, "is it something she did to you?"

Pixie's resentment

The technique works, and Pixie pours forth her woeful tale of how mean Miranda was in not telling her about Ellen's party. Obviously, Pixie had forgotten her story. It was repressed. Apparently she had never brought it up to Miranda, and Miranda never knew that Pixie had been nursing this resentment all this time.

Infantile ethics

Pixie remarks that it was simpler when she thought Miranda was to blame. This is an example of a child's concept of ethics, according to which the world is responsible for whatever goes wrong. Blame may even be attributed to inanimate objects. Thus, people kick chairs they have tripped over and blame the other person when an accident occurs.

Family relationships

At this point, the question of family relationships comes up. Pixie says she would rather have Isabel as a sister, and Miranda says that there is no way that could be: she and Pixie have to be sisters because they have the same parents. By specifying common parentage, Miranda has defined the essential conditions for two people being sisters (providing they're female).

How can we tell if relationships are real?

Pixie disputes the reality of relationships. She offers her own criterion of reality: to be real, a thing must be capable of being seen or touched. Her reasoning is syllogistic: Only things that are real are things that can be seen or touched; no relationships can be seen or touched; therefore, no relationships are real.

Are relationships perceivable?

Miranda cites spatial relationships as a counter-example. She says that "being taller than" is a relationship, and "anybody can see that I'm taller than her." The dispute between Miranda and Pixie on the perceptibility of relationships is a long-standing one in philosophy. Some people have thought only things are perceivable; for them, relationships are "in our minds." People see the two girls and then judge one of them to be taller than the other. The judgment of "taller than" is a mental act and therefore "in the mind." For other people, relationships are as perceivable as things are. The river is moving relative to its banks, and one sees the contrast between the moving river and the stationary shore. This perceived contrast is the relationship. If one sees a person standing in a doorway, one does not see two things, the person and the doorway, and then make a judgment of containment. The relationship is directly perceived, not deduced.

Do we perceive resemblances?

Pixie, of course, takes the first of these positions.. Miranda seems to be taking the second and their mother attempts to mediate between the two. Nevertheless, the mother seems more than a little sympathetic with Miranda's position. The evidence she offers is that family relationships are perceivable in the form of family resemblances. This argument, as advanced by Pixie's mother, may have some plausibility at first but, if examined, would seem to leave matters just as controversial as before. Even if Pixie's mouth resembles her father's mouth, do other people perceive the relationship of resemblance between the two mouths? They might just perceive two people and then make a judgment of resemblance.

Right and wrong as dependent upon definition

Miranda now questions Pixie's criterion of reality: a thing can't be real if it can't be seen or touched. Their mother counters with the diplomatic assurance that the criterion of reality one selects depends upon one's definition of reality. Pixie says that this fails to enlighten her as to who is right and who is wrong. The mother questions whether the terms right and wrong are applicable in such situations. Her reply leaves Pixie bewildered.

Demanding reasons

The issues here are extremely complex and difficult. Perhaps it would be sufficient simply to point to the fact that the discussion between the mother and her two daughters is a model of demanding reasons for opinions. Whenever someone introduces a term such as relationship or reality, questions are asked: How can you tell? What do you mean by that? Why are you so sure of that? What makes you say that? What difference does it make? The individuals in the discussion demand evidence to back up assertions and reasons to support beliefs. They may not come to any firm conclusions, but at least the dialogue presents an example of philosophical inquiry which your students will come to emulate.

EXERCISE: Staring (p. 21, lines 6-9)

In the following situations, say if you think the staring is appropriate or not appropriate and why.

Not Appropriate Appropriat ? e 1. You are walking by the ocean when the moon is full. The light it sheds on the water is beautiful against the dark of the night. You stare at the moon for a long time. Your uncle is having an art show to display some of his paintings to the neighbors. One painting is of a beautiful woman. When you see it, you stop and stare at it for a long time. A half hour later the model for the same portrait walks into the room You are sitting in a chair in the corner. You stare at her for 10 minutes. 4. You've never seen anyone in their 90's. You go to your uncle's house and meet his neighbor who is 91. Her skin is very wrinkled. You stare at her for a long time. 5. You visit your cousin who just had a baby. The baby is 2 months old and has green eyes. When your cousin brings you into the baby's room, you stand by the crib and stare at the baby. You want to take a picture of your friend with your new camera. You stay close to him all morning. When he sits down to play with his model cars, you stare at him for a long time. Then you take the picture. 7. Your class visits a large national park with many animals. When you see a large raccoon, you stare at it for a long time. 8. You and your friend go with your friend's mother to pick up her watch at the local department store. When vou get to the watch counter, you see a Snoopy watch. You have no money. You stand and *stare* at the watch. The math test is given out. You look at the first two problems and know you can't do them. For the next

30 minutes, you *stare* at the paper.

AMS

EXERCISE: V	What does	the word	"doing"	mean?
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(p. 21, line 10)

Check whether you think the following pairs of sentences use the word "do" in the same way or differently.

		Same	Different	?
1.	In the evenings, Josephine <i>does</i> the dishes. In the evenings, Josephine <i>does</i> her homework.			
2.	When the chicken was <i>done</i> , dinner was served. When his work was <i>done</i> , he looked at TV.			
3.	My father asked, "Who <i>did</i> this to you?" My mother said, "I hope you <i>did</i> your best."			
4.	My sister had her hair <i>done</i> yesterday. See if the clothes in the dryer are <i>done</i> .			
5.	My sister is <i>doing</i> her nails tonight. My sister is <i>doing</i> well in her business.			
6.	For a class play, we <i>did</i> Peanuts. All day yesterday, we <i>did</i> nothing.			
7.	"I think this dress will <i>do</i> very well for the party," she said. The hospital reported, "Mother and child continue to <i>do</i> well."			
8.	"I've been <i>doing</i> time in prison," he said. "I've been <i>doing</i> business in Spain," she replied.			
9.	After we visited Italy, we <i>did</i> France. After we acted in plays, we <i>did</i> puppet shows.			
10.	"You <i>did</i> me in," she shouted. "` <i>Did</i> I really?" he replied.			
11.	Do you want me to write on the board? Please do.			
12.	"Well," he said, "how <i>did</i> I do?" "Oh," she replied, "I think you'll <i>do</i> ."			

EXERCISE: Ambiguities

(p. 21, line 10)

1. Daisy: "Kenny, what are you doing here in the department store?"

Kenny: "I'm trying to get something for my baby brother."

Daisy: "How much do you think they'll give you?"

2. Muffy (standing by table in cafeteria): "Hi, Linda, can I join you?" Linda: "I didn't know I was coming apart."

3. Glenn: "I can't stand kids between seven and nine."

Ronnie: "Oh, for me, the worst time is from three to six in the afternoon."

4. Mort (watching football game on TV): "Hey, dad, it's twenty to ten."

Father: "Well, that's forty minutes past your bedtime, so turn that thing off."

5. Herb: "This dog of mine is sure smart."

Maizie: "What makes you think so?"

Herb: "I asked him how much three minus three was, and he said

nothing."

6. Teacher: "Sally, what's one and one?"

Sally: "A ball and a strike."

7. Teacher: "Cliff, wouldn't you like to sit down for a spell?"

Cliff (to himself): "That could mean all sorts of things." ML

EXERCISE: Faking

(p. 21, lines 14-15)

In the following cases, say whether you think the person was or was not faking.

		Faking	Not Faking	?
1.	Scott: "Ever since Linda pinched her finger this morning, she's walked with a limp."			
2.	Joel: "Sure Myrna walks funny. But that's because she lost her shoes, so she's wearing her sister's."			
3.	Cassie: "My baby brother, Butch, is always crying for food. He's quiet right now, so he must be pretending he's full."			
4.	Triggerman: "The police chief is bluffing. All those squad cars around the house don'tmean a thing."		□.	
			N	ЛL

EXERCISE: Answering a question with a question

(p. 22, lines 2-4)

Okay Not okay ?

Pixie's mother asks her why she doesn't get along with Miranda. Pixie answers, "Why don't you ask her why she doesn't get along with me?"

Is it ever all right to answer a question with a question? (Don't everyone respond all at once with the question, "What do you mean by 'all right'?")

In the following instances, a question is answered with another question. Say whether you think it is or is not okay to answer in such a fashion, and give a reason.

		Onay	not onay	•
Mother: Jeff:	"Isn't it time for you to go to school?" "Do I have to?"			
Donna: Jeanne:	"What happened to last year's snow?" "What happens to your lap when you stand up?"			
	"George, will you tell me your secret?" "What if I don't have a secret?"			
Mitzi: Trixie:	"Isn't that egg on your face?" "How can you tell?"			
Sid: Guy:	"What was the year of Washington's birth?" "What makes you think he was born?"			
Lou: Sue:	"Was George Washington ever president?" "Did Benjamin Franklin discover electricity?"			
Holly: Vicki:	"Do you ever fight with your brother?" "Is that any of your business?"			
Tom: Jerry:	"Do you mean to say that you're nine years old and already married?" "Would I lie?"			
). Goldie: Phil:	"What do you think about life?" "What do I think about life?"			
I. Trudy: Gwen:	"Is it true you like Joe?" "What's it to you?"			
2. Jeff: Walt:	"Don't you just love Pixie?" "Are you for real?"			
	Veronica Mother: Jeff: Donna: Jeanne: Cal: George: Mitzi: Trixie: Sid: Guy: Lou: Sue: Holly: Vicki: Tom: Jerry: O. Goldie: Phil: Trudy: Gwen: 2. Jeff:	Veronica: "How old are you?" Mother: "Isn't it time for you to go to school?" Jeff: "Do I have to?" Donna: "What happened to last year's snow?" Jeanne: "What happens to your lap when you stand up?" Cal: "George, will you tell me your secret?" George: "What if I don't have a secret?" Mitzi: "Isn't that egg on your face?" Trixie: "How can you tell?" Sid: "What was the year of Washington's birth?" Guy: "What makes you think he was born?" Lou: "Was George Washington ever president?" Sue: "Did Benjamin Franklin discover electricity?" Holly: "Do you ever fight with your brother?" Vicki: "Is that any of your business?" Tom: "Do you mean to say that you're nine years old and already married?" Jerry: "Would I lie?" O. Goldie: "What do you think about life?" Phil: "What do I think about life?" "Trudy: "Is it true you like Joe?" Gwen: "What's it to you?" 2. Jeff: "Don't you just love Pixie?"	Linda Lou (age 9, to Veronica, age 9): "Veronica, how old are you?" Mother: "Isn't it time for you to go to school?" Jeff: "Do I have to?" Donna: "What happened to last year's snow?" Jeanne: "What happens to your lap when you stand up?" Cal: "George, will you tell me your secret?" George: "What if I don't have a secret?" Mitzi: "Isn't that egg on your face?" Trixie: "How can you tell?" Sid: "What was the year of Washington's birth?" Guy: "What makes you think he was born?" Lou: "Was George Washington ever president?" Sue: "Did Benjamin Franklin discover electricity?" Holly: "Do you ever fight with your brother?" Vicki: "Is that any of your business?" Tom: "Do you mean to say that you're nine years old and already married?" Jerry: "Would I lie?" D. Goldie: "What do you think about life?" Phil: "What do I think about life?" Gwen: "What's it to you?" Don't you just love Pixie?"	Veronica: "How old are you?" Mother: "Isn't it time for you to go to school?" Jeff: "Do I have to?" Donna: "What happened to last year's snow?" Jeanne: "What happens to your lap when you stand up?" Cal: "George, will you tell me your secret?" George: "What if I don't have a secret?" Mitzi: "Isn't that egg on your face?" Trixie: "How can you tell?" Sid: "What was the year of Washington's birth?" Guy: "What makes you think he was born?" Lou: "Was George Washington ever president?" Sue: "Did Benjamin Franklin discover electricity?" Holly: "Do you ever fight with your brother?" Vicki: "Is that any of your business?" Tom: "Do you mean to say that you're nine years old and already married?" Jerry: "Would I lie?" D. Goldie: "What do you think about life?" Phil: "What do I think about life?" Gwen: "What's it to you?" Don't you just love Pixie?"

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DISCUSSION PLAN: On being alone

(p. 22, lines 17-19)

- 1. Are there times when you want to be alone?
- 2. Is wanting to be alone the same thing as wanting privacy?
- 3. Is it possible that you could like people very much, and still want to be alone?
- 4. Is it possible that you could not like people very much, and still not like to be alone?
- 5. Is it possible that some people want to be alone because they want to cry, like Pixie in her mother's closet?
- 6. Is it possible that some people want to be alone because they want to laugh, or to be happy?
- 7. Is it possible that some people want to be alone because they can think more clearly when they're alone?
- 8. Is it possible that some people want to be with others because they can think more clearly when they can talk things over with others?
- 9. What are the worst things about being alone?
- 10. What are the best things about being alone?

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DISCUSSION PLAN: What Ellen intended

(p. 22, line 22)

Pixie says that Ellen "meant to" bring the invitations to Miranda and Pixie. We see here that "intended" and "meant to" are synonyms (mean the same thing.)

The purpose of this discussion is to find out more about what happens when we "intend" to do something.

- 1. If Ellen "meant to" bring the invitations, does that mean she *planned* to bring them?
- 2. If Ellen "meant to" bring the invitations, does that mean she *wanted* to bring them?
- 3. If Ellen *wrote* the invitations, does that mean she *wanted* to write them?
- 4. If Ellen *forgot* to bring the invitations, does that mean she *intended to forget* to bring them?
- 5. If Ellen *remembered* to bring the invitations, does that mean she *intended to remember* to bring them?
- 6. If you are in the habit of brushing your teeth every morning, does that mean you *intend* to brush your teeth every morning before you actually do?
- 7. If you get sick and are unable to do your homework, does that mean you *intended* to do it before you got sick?
- 8. Discuss the following conversation:

Teacher: "Did you do your homework?"

You: "No, I got sick."

Teacher: "Before you got sick, did you intend to do your homework?"

You: "No." Teacher: "No?"

You: "I never had a chance to intend to do it. But I can remember

that, after supper, I intended to intend to do it."

EXERCISE: Comparisons

(p. 23, lines 22-26)

Certain words are very useful for suggesting *relationships*. These are *comparison* words. Check the list of words on the right, and see which ones fit best into the sentences on the left. If none seem right for a sentence, put a question mark in the blank. If more than one seems right, say which they are.

1.	The doctor said	, "I'd better op	erate on the		patient first.'
2.	"This tower of the World Trade Center," said the man, "is				than that one.'
3.	The man in the store said, "Yesterday's fish are			than today's.'	
4.	The President said, "The Washington Monument is			than my house.'	
5.					
6.	"Airplanes," said	d Gus, "are			than cars.'
7.	"Why is it," aske	ed Vince, "that	your neighbor's la	awn always seems	than your own?'
8.	One horse said	to the other, "	Oats are		than hay.'
9.	Lake Superior is	S			than Lake Huron.
10.	Circles are				than squares.
	taller		drier		
	heavier	faster	friendlier	smellier	
	weaker	slower	easier	healthier	
	shorter	nicer	tastier	sicker	
	stronger	softer	dustier	sunnier	
	lighter	harder wetter	greener	flatter	M
		wetter		rounder	ML
EX	ERCISE: Com	pleting con	nparisons	(p	. 23, lines 22-26)
1.	Rabbits' ears	are softer tl	nan	ears.	

1.	Rabbits' ears are softer than	ears.
2.	Eagles' eyes are sharper than	_ eyes.
3.	Steel is stronger than	
4.	Glass is more breakable than	_•
5.	is smaller than the sun.	
6.	is larger than Rhode Island.	
7.	is not as wet as water.	
8.	is warmer than ice.	
9.	is quieter than Brian.	

10.	Pixie talks more than	MI

EXERCISE: Different ways of expressing relationships (p. 23, lines 22-26)

You may want to say something about the relationship between John and Mary. For example, you could put it these ways:

John is in love with Mary.

1 The grange juice was drunk by Tony

4. The two hills are connected by the bridge.

John loves Mary.

Mary is loved by John.

How would you express the following sentences differently?

1.	The orange faree was arank by Tony.	
	1 a	. •
2.	The pot covers the cup.	
	2a	. •
3.	The lion is chasing the giraffe.	
	3a	

- 4a. ______.
- 5. Joe works for the bank.
 5a. _____

6. Ed won the race.

6a. ______.

7. The sun outshines the moon.

7a. ______.

8. 4 is the product of 2 x 2.

8a. _______.

9. George approaches Marie.

9a. ______.

10. Linda is the daughter of Mr. Smith.

10a. _____

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EXERCISE: Comparisons and comparatives (p. 23, line 23) 1. With respect to color, eggshells are than mashed potatoes. With respect to size, trucks are ______ than cars. With respect to light, light bulbs are _____ than candles. With respect to taste, sugar is_____ than salt. With respect to shape, doughnuts are _____ than crackers. With respect to sound, airplanes are _____ than bicycles. With respect to courage, R2D2 is ______ than C3P0. With respect to beauty, deer are ______ than pigs. With respect to weight, water is ______ than air. 10. With respect to speed, sound is ______ than light. 11. With respect to age, Miranda is than Pixie. 12. With respect to strength, Olive Oyl is ______ than Popeye. 13. With respect to wealth, children are _____ than grownups. 14. With respect to intelligence, elephants are ______ than tapeworms. 15. With respect to odor, garbage is ______ than roses.

EXERCISE: Comparatives, superlatives and relationships (p. 23, line 24)

There are certain words which can be changed so that they mean more or most. For example, "slow," can be changed to "slower" and "slowest." Can you make the same changes (to more and to most) in the case of the the following words? Which words can't be changed?

		More	Most ?
1.	easy		·
2.	dull .		
3.	first		
4.	snappy		
5.	dull		
6.	noisy		
7.	dead		
8.	perfect		
9.	ready		
10.	last		
11.	silent		
12.	eager		
13.	most		
14.	quick		
15.	final		
II.	Complete the	following:	
1.	Jon's height is	s 4 feet; Joe's is 5 feet; Jim's	s is 6 feet.
	, ,	; Jon is	
2.	Gwen weighs pounds.	5 75 pounds; Lou weights	85 pounds; Tina weighs 90
	Gwen is	; Tina is	3
3.	Cindy can wa		rank can walk it in 20 minutes;
	Cindy is	; Josie i	s

DISCUSSION PLAN: Comparisons and standards

(p. 24, lines 4-7)

Miranda and Pixie are visiting the museum. They come into a room containing the airplane that the Wright brothers flew at Kitty Hawk.

Miranda says, "Look, Pixie, this is the first airplane that flew." "It sure is a small airplane," Pixie replies.

Miranda scratches her head. Then she says, "It does look small to us now. But could you have called it "small" in those days when it was the only airplane in the world?"

"There were big ships and big buildings in those days," says Pixie. "Compared to *them*, it was small."

Miranda answers, "Compared to *them*, sure. But when it was the only airplane in the world, could you say it was a 'small airplane'?"

"I can compare anything with anything else," Pixie says.

"Sure," says Miranda. "But when you say it's a small *airplane*, you must be comparing it with other airplanes. And if there were no other airplanes, then, no one at that time could have called it small or big."

- 1. Was the first house that was ever built a "big" house? Was it a "small" house?
- 2. Was the first skyscraper a big skyscraper? Was it a big building?
- 3. The first American flag is now over 200 years old. Was it once new?
- 4. Does everything new later become old? Does everything large later become small?
- 5. Can Pixie ever become older than Miranda?
- 6. Can children ever become taller than their parents?
- 7. Is a big baby larger than a small grown-up?
- 8. Is there any way in which the moon could be larger than the sun?
- 9. Could a turtle live for 70 years and still not be old?
- 10. Is it true that lions and tigers are "big cats"?

ML

DISCUSSION PLAN: Comparisons and standards

(p. 24, lines 4-7)

Pixie and Isabel were seated at their desks. Pixie turned to Isabel and said, "I learned something today. No one could say whether the first airplane was big or little." Isabel didn't say anything. She just looked at Pixie.

"See," said Pixie, "whenever something's the first of its kind, you can't say anything about it."

Isabel yawned. Then she said, "Was there ever a first game of marbles?" "Of course," Pixie replied. "So what?"

"When they drew that first circle on the ground, do you think the players could have said whether it was round or not?"

"Sure they could have," said Pixie.

"So there are lots of things we can say about things that are new," Isabel said, picking up her book.

"Gee," said Pixie, "when I talk to Miranda I get one story, and when I talk to Isabel I get another."

- 1. Suppose you had been present when the first box of candy was made. Could you have said whether or not it was a *big* box?
- 2. Could you have said whether or not it was a square box?
- 3. Could you have said whether it was one box or two?
- 4. Could you have said whether it was or was not a box of candy?
- 5. If everyone ate the candy in the box, could you have said whether it was or was not the *same* box of candy as when it was first made?
- 6. Suppose you had never before seen the color red, or heard of the word "red." And suppose this was a red box of candy. Could you have said, "This is a *red* box of candy"?
- 7. Suppose you knew the color red and the color yellow, but had never seen the color orange. Do you think you could *figure out* that, if you mixed red and yellow, you would get orange?
- 8. If you had never tasted candies, do you think you could *figure out*, just from looking at them, how they taste?

EXERCISE: Relationships in the form of comparisons

(p. 24, lines 6-7)

Whenever we compare two things, we are saying that the two things have a certain relationship to one another. If we say that France is older than the United States, we are comparing the two countries with respect to age.

Comparisons can be classified in many different ways, such as comparisons of weight, of color, of feelings, of value, and so on. A number of such classes are given below, with examples of each kind. See how many more examples of each kind you can think up.

Family	Time	Value	Space
is a cousin of	is later than	is better than	is farther away than
is a sister of	is earlier than	is superior to	is closer than
is the father of	is the day before	is worth more than	is larger than
is the aunt of	is the day after	is cheaper than	is rounder than
is the wife of	is slower than	is no better than	is more angular than
Touch	Taste	Sound	Color
is softer than	is more bitter than	is louder than	is bluer than
is rougher than	is sweeter than	is softer than	is redder than
is fluffier than	is saltier than	is more shrill than	is more purple than
is smoother than	is tastier than	is more harsh than	is lighter than
is greasier than	is more sour than	is more on key than	is darker than
Weight	Feelings	Actions	Character
is heavier than	is happier than	is clumsier than	is more stubborn than
is lighter than	is angrier than	is more restless than	is more courageous than
Cause-effect	Means-end	Part-whole	Class-members
	is designed to	is part of	is a member of
is the cause of	is intended to	participated in	belongs to the class of
is the result of	is meant to	is involved in	is a
brings about	is made so that	belongs to	is one of
makes		-	

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EXERCISE: Family resemblances

(p. 24, line 15)

- A. Which of the things mentioned in the left-hand column below are *family resemblances*? (shared by some or all members of a given family) and more or less typical of members of that family?
- B. Which are more genera! traits (which everyone in the family *must* have)?
- C. Which are more specific traits (which very few members have or need)?

		To the Metaline Com	ഗ	and the Marian Sam	Mr. Smith's Father	47: 3 M	Mr. Smith	Brenda	Pookie	Tim	Chip
1.	has big ears		₩		₩	☼			☼	☆	\Rightarrow
2.	is a human being	☼	abla	abla	abla	☼	abla	☼	☼	☆	\Rightarrow
3.	weights 102 pounds	☼						☼			
4.	talks a lot			₩					$\stackrel{\leftrightarrow}{\Box}$		
5.	has a wide mouth	$\stackrel{\leftrightarrow}{\Box}$			☼	☼	☼	☼	☼	☼	
6.	eats food	$\stackrel{\leftrightarrow}{\Box}$	☼	₩	☼	☼	☼	☼	☼	☼	\Leftrightarrow
7.	breathes	$\stackrel{\leftrightarrow}{\Box}$	☼	₩	☼	☼	☼	☼	☼	☼	\Leftrightarrow
8.	is friendly	☼	☼	☼	☼	☼			☼		☼
9.	is quiet	☼									
10.	takes pills regularly	☼	☼	☼	☼	☼	₩				

Episode 2

(p. 25)

Pixie's mysteriousness

Pixie likes to be mysterious. That is, she implies that she knows secret things that other people would die to know. She hints very portentously about her secrets. She challenges the reader to try to guess what they are, but at the same time, she defiantly announces that even if the reader guesses correctly, she will refuse to tell him if he is right.

Pixie's fascination

What can be said about such behavior? She is a tease and a charmer, but she is also a publicist. She surrounds what she does with an aura of intrigue, so as to make it fascinating to the reader. In a sense she is prompting interest in herself.

Pixie and the mystery story

Pixie is telling us that there is a truth about her story and she's the only one who knows it. For other people, there's no way to know if they are getting close to her story, unless they can somehow identify with her and the way she thinks, put themselves in her place, and reconstruct the mystery story as she might have constructed it. The clues she gives are contained in "the story of how I made up my mystery story," in other words, the story *Pixie*.

Reconstructing works of art

Composers have completed the unfinished works of other composers. To do this, they must be steeped in the completed works of the original composer. Thus, if a reader can internalize Pixie's story of "how I made up my mystery story," perhaps that reader could come to reconstruct Pixie's mystery story for himself. On the other hand, because the reconstruction could not be verified, the reader would be free to create his own story, provided he did not produce anything that would be totally inconsistent with the clues that Pixie has given. This could be a lot of fun.

Pixie's reason for secrecy

Pixie does say in this episode that eventually she might reveal her reason for not telling us her mystery story, if it turns out that she doesn't tell us. That implies that she must have a reason, and is aware of that reason at the telling of this episode.

EXERCISE: Can one thing make you think of something else?

(p. 25, line 1)

Write down what the word on the left makes you think of. Then compare your answers with those of your classmates.

1.	peanut butter	•
2.	piano	
3.	hot dogs	
	cotton candy	
5.	sausage	
	toast	
	cops	
8.	hide	
9.	milk	
	day	
11.	Santa Claus	

AMS

ML

EXERCISE: When is it appropriate to guess?

(p. 25, line 8)

Check those items that you think are appropriate for guessing, and those that are not appropriate for guessing. Place a question mark next to any item that you're not sure about. Then tell the class why you put in the answers you did.

		Guessing appropriate	Guessing not appropriate	?
1.	You are asked to give an answer to a math problem.			
2.	Your aunt calls on the phone and asks you "Where is your mother?"			
3.	You go to the dentist and the doctor asks you "When is the last time you brushed your teeth?"			
4.	When you arrive at school, the principal asks you, "Are your parents coming this evening for a conference?"			
5.	You take your bicycle to the bike shop and the man asks you, "How did the tire become flat?"			
6.	You go to the school play rehearsal and the conductor asks you to sing your part. You decide to make some words up as you haven't the words of the song.			
7.	The telephone rings. It is the woman on the television show, Guess That Tune. She hums a tune and asks you, "What is the song's name?"			
8.	The class is divided into two groups for a spelling bee. If you miss the spelling of a word, you have to sit down. Your turn comes and the teacher asks you to spell "niece." You don't know the answer for sure, but you guess.			

EXERCISE: Reasons and excuses

(p. 25)

A good reason is usually one that clears the person of any blame, and is very plausible or convincing. For example:

Mrs. Jones: "Why is the baby crying, Mary?"

Mary: "He wants the kitchen knives and I won't give them to him."

An excuse, on the other hand, is usually offered by a person who admits that he may have been in error to some extent, or to blame to some extent, but still he wants to put himself in the best possible light, and to show that he is to be excused, all things considered. For example:

Teacher: "Johnny, why did you just slap Oscar on the head?"

Johnny: "There was a mosquito buzzing around his head, and I was

afraid it would bite him."

How would you classify the following:

			Good Reason	Excuse	?
1.	Cindy: Marsha:	"Marsha, why didn't you invite me to your party?" "I didn't think you'd have a good time, because there would be so many boys there."			
2.	Russ: Gary:	"Gary, why didn't you invite me to your party?" "It was just for my relatives."			
3.	Pam: Dick:	"Do you purposely leave all the lights burning in your house when you're not home?" "It's not that I'm forgetful. It's to scare off possible robbers."			
4.	Tara: Grocer:	"Mister, these bananas are either green or overripe." "That's the way our customers like them."			
5.	Teacher: Spud:	"Spud, did I see you take a chocolate cake from the bake sale table?" "Yes, I thought I'd take it out in the back alley, in case there might be some hungry kids out there I could share it with."			
		onaro a mun.			ML

EXERCISE: Excuses and reasons

(p. 25, lines 20-24)

Indicate whether the following excuses are *good* reasons or *poor* reasons. Then tell why you think so.

		Good Reason	Poor Reason	?
1.	When I woke up this morning, I had a sore throat. I said to my mother, "Momma, I can't go to school. I'm sick."			
2.	The other day the teacher asked me for my homework. I said, "I didn't do it. My brother took me to the movies last night."			
3.	I discovered from Susan that Carol, my best friend, told Susan my secret. I asked Carol why she did that. She answered, "I felt like it."			
4.	Tuesday I was late for school. When I got to my class-room, my teacher asked, "Why were you late?" I answered, "I overslept."			
5.	I promised Brendan that I would play with him last Wednesday after school. At 3:00 p.m., Jody invited me to come to her house. I went. The next day, Brendan asked, "Why did you break your promise?" I said, "I knew I'd have more fun at Jody's house. She has a big doll house, and you don't."			
6.	Every Saturday, I have to clean my room. It's a family rule. I said to my father, last Saturday, "I can't clean my room this Saturday. I have to go to play rehearsal."			
7.	My mother told me that I could go shopping with Marion and her mother. She also said, I was to be back at 5:30 p.m. for dinner. I got home at 6:30. When my mother asked me why I was late, I said, "Marion's mother had to go to <i>many</i> stores."			
8.	I told my sister, Eileen, I would meet her at the play-ground at 3:15 p.m. I was a half hour late. When she asked me why I was late, I said, "My teacher asked me to stay after school to clean the blackboards."			
9.	Jennie has a big aquarium. She asked me if I would like to go to the pet shop and help her select a new fish. I said, I'd love to. When we got to the store, I spent all the time playing with the poodles. Afterwards, Jennie said, "Why did you do that?" I answered, "I hate fish."			
10.	Helen and I went to our dance Jesson on Wednesday afternoon. In the middle of the lesson, she said, "I have to go home now." When I asked her why, she said, "I want to play ping-pong with my older brother."			
			Al	MS

Episode 3

(pp. 25-26)

Excusing and excuses

One of the words that small children use very frequently in a number of different senses is the word "excuse." A child will raise his hand and ask to be "excused" from the class. Another child will engage in a minor breach of etiquette and say "Excuse me." A third child will say that she needs an "excuse" to bring to her teacher to explain why she's late for school. Still another child will say "That's only an excuse," when her sister tries to explain some behavior.

Is an excuse a good reason?

When used as a verb, excuse usually means pardon. When used as a noun, it can either mean a good reason or a pretext. Pixie and her mother are debating two interpretations. Pixie's mother thinks of an excuse as a good reason. Pixie, on the other hand, considers an excuse to be a mere pretext or as she puts it, "a bad reason." The argument between Pixie and her mother is not resolved, but it does raise the question of how to distinguish between good and bad reasons, whether the latter are called excuses or anything else.

How strong must a reason be to be good?

A reason should be strong enough to justify the doing of an act or the holding of a belief. A trivial act may require only a trivial reason to justify it. But an act that has a great many consequences requires a reason of considerable strength. Someone is asked, "Why didn't you help that little girl whose dress was in danger of catching fire?" and he responds, "I saw it, but I was tying my shoe laces," there is a disproportion between the urgency of the action that is required and the weakness of the reason for not performing the action. On the other hand, if someone asks, "Why did you flag down the train?" and the answer is "because I could see that a car was stalled on the track," people would accept the response as a good reason.

Justification is a relationship between an act or belief and the reasons that support it

In principle it is possible to distinguish between good and bad reasons for a given act or belief. In practice, the difficulty is often considerable, and what

strikes one person as a mere "excuse," may strike someone else as ample justification for performing an act.

EXERCISE: Excuses and reasons

(p. 25, lines 15-20)

Sometimes the words "excuse" and "reason" are used interchangeably. At other times, they are employed in very different senses. How would you decide which word to use in the following cases:

		Either "excuse" or "reason"	Only "excuse" will work	Only "reason" will work	Neither
1.	Dan:"My for getting vaccinated is that it will keep me from getting sick."				
2.	Gigi: "Yesterday I played hookey. Now I wonder what I can give for having been absent."				
3.	Cassandra: "Whenever Jack bumps into me, which is just about every day, he says, `I'm so clumsy!' But clumsiness is no"				
4.	Andrea: "My belief that Paris is the capital of France rests on the that the world atlas says so."				
5.	Carl:"My for walking bent over like this is that my shirt is caught in my pants."				
6.	Fumphy: "It seemed to me that man went onto the side of the road in order to run over that squirrel, but his was that he couldn't stop."				
7.	Polly: "For everything that happens in the world, there's a"				
8.	Herman: "Last year I failed English because I never turned in any homework. What's your, Max?"				
9.	Sally: "This guy keeps calling me, and then gives the that it's a wrong number."				
10.					
	•				ML

EXERCISE: When is a reason a good reason?

(p. 25, lines 15-23)

Consider the following remarks, and say whether you think that what is being said represents a good reason, a reason (although not necessarily a good one), or something that is not a reason at all.

			Good reason	A reason, but not a good one	Not a reason
1.	Gary:	"The reason I suspect this man, Grench, of being the murderer is that the murderer wore shoes and Grench wears shoes."			
2.	Lola:	"I suspect Grench because the murderer wore size 7% shoes and Grench wears size 8% , and that's close!"			
3.	Dora:	"I think Grench is innocent, because I get headaches whenever I try to figure things out like this."			
4.	Sam:	"I think Grench was the murderer, in view of the fact that he confessed."			
5.	Jake:	"I refuse to draw any conclusions before Grench's trial, because he retracted his confession."			
6.	Oliver:	"Grench is absolutely innocent! My astrologist has told me so!"			
7.	Matilda:	"Grench is one beautiful hunk of man! Of course he's innocent!"			
8.	Nelda:	"Grench did it, all right: his fingerprints were found on the gun. What difference does it make that the murder weapon was a knife?"			
9.	Howard:	"Grench's grandfather served time for being a draft dodger. That's what convinced me he did it."			
10.	Sherryl:	"Okay, I'm going to flip a coin. Heads he's innocent, tails he's guilty. How about that: tails!"			
					ML

EXERCISE: When is it appropriate to ask questions?

(p. 26, line 6)

In the following situation, indicate whether you think the question is appropriate or not. Then tell the reason for your answer.

		Not		
		Appropriate	Appropriate	?
1.	My mother's new friend came over for a visit last evening. I answered the door and said, "Hi! How old are you?"			
2.	Last month I went to see my grandparents. In the corner of the living room they have a desk with many drawers. I asked my grandfather, "What do you keep ineach drawer?"			
3.	My sister, Ellen, had a date last night with a new boyfriend. When he came to the door, I let him in, and asked, "Are you going to take my sister out more than once?"			
4.	I met Karen on my way to school. She looked as if she had been crying. I asked, "Why have you been crying?"			
5.	My older brother brought home his report card. As soon as he came into the house, I asked, "Did you pass everything?"			
6.	Cynthia invited me over to her home to have dinner. When we were all seated, I asked Cynthia's mother, "What is that meat?"			
7.	Cynthia came over to my house for a visit. As soon as she came in she asked my brother, "Do you have any girlfriends?"			
8.	On my first day at camp, I met my bunk counselor. I asked her, "Are you mean?"			
9.	Sally and I went to the softball game after school. When we arrived, I saw Carol. Immediately, I asked, "Are you my friend?"			
10.	The other day, my sister, Francine, fell and hurt her arm. She had to go to the doctor. As she was leaving the house, I asked, "Will you be coming back?"			

AMS

Episode 4

(pp. 26-28)

Telling it like lit will be

There's an ancient anecdote about a man who wrote a story about how he raised a boat from the bottom of the river and made it capable of riding on the seas once more. He made enough money from the story to raise the boat from the bottom of the river and make it seaworthy. Such a story is analogous to Pixie's telling her father that she doesn't have to wait until after the zoo trip to make up a story about what the zoo trip made her think of.

Pixie's hints

Then Pixie gives two hints about the subject of her mystery story: 1) the difference between animals that think and animals that don't; and 2) how thinking starts, or where it comes from. Thus any reconstruction of Pixie's story has to be consistent with these two hints.

Pixie's screaming

Pixie screams at the cat and her father says, "you don't see me run around the house screaming all the time, do you?" He asks, "Why do you scream so much?" It is probably true that children scream, but is it true that they make more noise than grown-ups? Children may hear the booming voices of adults with as much annoyance as adults feel when they hear the screams of children.

Using others as models

Another factual question is raised by Pixie's asking her father to remember how he was when he was a child. He's not sure. Has he conveniently forgotten? He responds by noting that even if he did use to run through his house screaming, when he was a child, that would not necessarily make it right. Obviously the question he is raising is whether one person's conduct can ever serve as another person's excuse to do likewise.

Comparing like cases

Pixie seems to be employing the strategy that when people talk about right and wrong, they should treat like cases alike and different cases differently. That is why she argues that if the comparison is to be a fair one, and like cases are to be compared with like, then what would be right for her to do now, is what was right for her father to do when he was a child. Her logic runs something like this: *If it wasn't wrong for you then, it isn't wrong for me now.*

It wasn't wrong for you then.
Therefore, it isn't wrong for me now.

Obviously, her father could deny either or both of these premises.

The difficulty of making exact comparisons

One has to be sympathetic with Pixie's attempt to invoke a principle of justice such as "Treat like cases alike." But it is easy to underestimate the difficulty of judging exactly what constitutes "like cases." For example, consider the story told by Collingwood of the child who wanted to marry his grandmother. His reason, he told his father, was "You married my mother, so why shouldn't I marry *yours*?" His father's task is not to challenge the principle but to explain to the child why these cases are different and therefore not comparable. It should be evident from this that skill in making comparisons is an essential component of skillful reasoning in ethics.

DISCUSSION PLAN: Secrets

(p. 27, line 2)

- 1. Do you enjoy keeping secrets? If so; why? If not, why not?
- 2. Do you enjoy telling secrets? If so, why? If not, why not?
- 3. Would you keep your best secret to yourself, even if it meant losing a friend?
- 4. Would you tell your best secret if that's what you had to do to keep a friend?
- 5. Are there some secrets you have that you'll tell, and some you have that you won't tell?
- 6. Is it possible to keep a secret from yourself?
- 7. Is a person with a lot of secrets a mysterious person?
- 8. Would the world still be an interesting place if all secrets were revealed?
- 9. Is it possible that every secret conceals another secret, so that when you learn what the first secret is, you find the second, and when you learn what the second is, you find the third?
- 10. Do you think there are secrets that nobody knows now, or ever will know?

ML

EXERCISE: Must stories always be based on first-hand experience? (p. 27, lines 6-8)

- I. Write a one-page story on one of the following:
- 11. How Leo the Lion was saved.
- 12. The Sun-Boy.
- 13. Misty, the cloud who couldn't cry.
- 14. Mimi the maple tree.
- 15. The prince and the daffodil.
- **II.** On the other side of the paper, after finishing your story, tell whether you have had first-hand experience of the things that you wrote about.
- III. Read your story to your classmates.

AMS

EXERCISE: Write the beginning and the ending of this story

(p. 27, Tines 6-8)

Now the firemen were attaching hoses to the hydrants on the street. They opened the hydrants with big wrenches, and the water quickly shot out of the hose nozzles.

Some firemen put water directly on the burning house. Some put it on the houses next door, to keep them from catching on fire too.

"Golly!" said Maggie, "do you think there's anyone in there?"

"I don't know," replied Gil. "That's what those firemen are going to find out now. Look! they're putting up their ladders!"

ML

EXERCISE: Comparing situations

(p. 28, lines 2-3)

It is important to be able to tell whether one act or situation is like another. For example, if we know that something was done that was wrong, then a similar act in a similar situation might also be wrong. But can we be sure the acts and situations are similar? Below are four brief exchanges. In each case, tell whom you agree with, and why.

1a. Connie: "Isabel, I'm your younger sister and Pixie is Miranda's

younger sister. So I should try to be like Pixie, right?

1b. Isabel: "Why don't you just try to be yourself?"

2a. Connie: "Isabel, when you do the right thing, shouldn't I try to be like

you so I could do the right thing, too?"

2b. Isabel: "Don't do it because I did it; do it because it's right."

3a. Miranda: "Since we live in the same house, have the same parents, eat

the same food, go to the same school, our situations are alike.

Therefore what's right for me is also right for you."

3.b Pixie: "It's not true we're in exactly the same situation. You're an

older sister and I'm a younger one. That changes everything."

4a. Tommy: "What's right for boys is right for girls."

4b. Pixie: "Who says?"

5a. Pixie's father: "What's right for grownups is right for children."

5b. Pixie: "Not always." ML

EXERCISE: Same and different meanings

(p. 28, lines 2-3)

Say whether you think the following sentences mean the same thing or mean different things:

		Mean the same thing	Mean different things	?
1.	Just the fourth graders may go outside. Only the fourth graders may go outside.			
2.	Even the fourth graders may stay home. Al! but the fourth graders may stay home.			
3.	The fourth graders are playing. Not only the fourth graders are playing.			
4.	Just the fourth graders are having lunch. Everyone except the fourth graders is having lunch.			
5.	Those who may go outside are fourth graders. Only fourth graders may go outside.			
6.	Everyone can leave, including fourth graders. Even fourth graders can leave.			
7.	No one can leave, except fourth graders. Everyone must stay, except fourth graders.			
8.	Fourth graders may leave when they are ready. If fourth graders are ready, they may leave.			
9.	No one can go to school today. No one has to go to school today.			

EXERCISE: Reasoning problems for analysis

(p. 28)

As we start to read a joke or verbal exchange, we are led to expect a certain line of reasoning to continue. The shock and surprise come in when a different—but perhaps equally plausible—interpretation is introduced. See if you can analyze these jokes or exchanges in accordance with the questions in the column on the right.

1. Virginia's mother: "Virginia, you keep slamming that door, and you've got to stop

it! Either go in or go out!"

Virginia: "Mama, that's exactly what I've been doing!"

Would you say that Virginia's mother thinks she should either go in or go out, while Virginia thinks she can do both? Can she do both at the *same* time?

2. Marie: "What's a scooter?"

Tess: "A skateboard with handlebars."

Marie: "What's a skateboard?"

Tess: "A scooter without handlebars."

How could Tess define a skateboard without making her definition circular?

3. Sign in first library: "If you have nothing to do, do it somewhere else."

Sign in second library: "If you have nothing to do, don't do it here."

Do the two signs say the same thing?

4. Kathy: "My father sent me over to see if you have any newspapers or

newsmagazines left."

News stand owner: "I only have one *Times* and and no *Times*."

Kathy: "I'd better go back and tell him you're not sure what you have."

The word *Times* appears twice. How could it be plural in one case and singular in the other?

Freddie: "Mister, does your dog bite?"

Man: "No."

Freddie: "Hey, he's jumping on me now! He's trying to bite me! I thought

you said your dog doesn't bite!"

Man: "He doesn't. But that's not my dog!"

Did you think that the dog jumping up on Freddie might not be the man's dog? Would you say you were *misled* into thinking it belonged to the man?

ML

Teacher Self-Evaluation Chapter Four

- 1. Have students had a good amount of practice in making comparisons?
- 2. Can students identify similarities and differences?
- 3. Does each student understand what a *standard* is and what a *relationship* is?
- 4. Can each student distinguish between a reason and a good reason? How do I know? Are they manifesting this skill in the way they talk to each other?
- 5. Do my students ask appropriate questions of each other during discussions? For example, "Why do you say that?"
- 6. Have I given students opportunity to do some creative writing?
- 7. Do I know what my students think of Pixie?
- 8. Have I been able to handle discipline in such a way as not to stifle inquiry, spontaneity on the part of each student, and originality?
- 9. Are more non-verbal students participating more? Am I doing everything I can to encourage them?
- 10. Are students asking each other for reasons?
- 11. Am I learning many things from listening to what the students say?

CLASSROOM DIALOGUE

Date	
Topic	

WHAT THE STUDENTS ACCOMPLISHED DOING THIS CHAPTER

EXERCISES IN THIS CHAPTER THAT WORKED

Specif	Skills Taught	REASON THEY WORKED
Specif	Skills Reenforced	
Specif	. Okins Recinorceu	
Specifin the	Skills to Work on ature	

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CHANGES I WOULD MAKE NEXT TIME I DO THIS CHAPTER OTHER SOURCES THAT RELATE TO THEMES IN THIS CHAPTER **CORRELATED EXERCISES CHILDREN'S LITERATURE** I WOULD USE Stories Play **MOVIES** ART WORKS AND PROJECTS MUSICAL COMPOSITIONS AND PROJECTS **DANCE EXERCISES**

OTHER

OVERLAPPING THEMES FROM THIS CHAPTER WHICH OCCUR IN OTHER DISCIPLINES I TEACH

CHAPTER FIVE

Episode I

(pp. 29-30)

"Where does the light go?"

This episode begins with Pixie wondering, "Where does the light go when you turn off the switch?" Pixie is suspicious of the usual answer that the light goes out, which is a figure of speech. Miranda is very condescending. She doesn't treat the question seriously. Instead, she personifies the light and says it goes to sleep. Upon pressure from Pixie, Miranda claims that the light "goes where the dark comes from." Miranda's second answer is puzzling. It suggests that there is some kind of region from which darkness emanates and to which light returns. Pixie immediately identifies this region with "Outer Space."

Belief in what there is

At this point, Miranda accuses Pixie of not believing in space and even implies that Pixie doesn't believe in anything. This raises a question of just what Miranda understands by the word "believe." Moreover, Miranda has converted Pixie's phrase "Outer Space," a fictional realm in which Pixie says she does not believe, into space in general.

Disbelief in space

Pixie replies that wondering is not equivalent to disbelief. However, Miranda's taunt bothers her and before she goes to sleep, Pixie actually does what Miranda had previously and incorrectly accused her of doing. She claims that space is nothing and gives two reasons: space is just a word, and it is just emptiness. So she has now consigned space to the same status of nonexistence as that to which she previously consigned relationships.

Is space just a word?

It might be worthwhile to consider Pixie's claims regarding the nonexistence of space. She says first, "It's just *a word!*" This is problematical. Pixie apparently means that the word "space" may have meaning but it doesn't *refer* to anything. In traditional terminology the word has *designation* (meaning) but lacks *denotation* (reference). Unicorn is another word which, in Pixie's view, has designation but not denotation. Of course, not all people would agree with her.

Is space just emptiness?

Pixie's claim that space is just emptiness is equally problematical. Newtonian space is generally understood as some kind of container or receptacle in which the universe has been placed. Within this frame of reference space is thought of as having a real existence. On the other hand, Aristotelian and Einsteinian notions of space seem to deny any kind of absolute character to space and to think of space as relational.

Mystery and the self

The episode ends with Pixie's reference to her mystery creature, her mystery story, and her many other mysteries, while admitting that she doesn't know what those mysteries might be. Her behavior raises some interesting questions: Can one have thoughts that are mysterious even to oneself at a particular time? Is it possible that one may be aware of the mysterious as a category and be able to infer that there might be a number of mysteries of which one is not aware? Further, perhaps one can be aware of mysterious and unexplored aspects of oneself without being able to identify just what those aspects are.

DISCUSSION PLAN: Light and dark

(p. 29, lines 2-7)

- 1. Pixie asks where the light goes. But first, where does it come from? Is it stored up in the light bulb?
- 2. Pixie asks where the light goes. She apparently suspects that the word "out" is ambiguous. But where does it go? Or does it go anywhere?
- 3. Miranda says the light "goes to sleep." Is that an ambiguous expression?
- 4. Is Miranda correct that the light goes where the dark comes from?
- 5. Is the dark really something, or is it just the "absence of light"?
- 6. Is the light really something, or is it simply the "absence of dark"?
- 7. Is dark the absence of light in the same way that cold is the absence of heat? Is that an analogy?
- 8. If you put some water on the stove and it gets warmer, does that mean that the cold in it has gone away?
- 9. Does light travel? Does heat travel? Does sound travel?
- 10. Does blue travel? Does warm travel? Does loud travel?

EXERCISE: Comparisons using "go" and "going"

(p. 29, lines 2-8)

Say whether, in each pair of sentences, the words "go" or "going" are used the same way or differently.

1. Chris: "I think I'!! go to the movies."

Bud: "Okay, I'll go with you, if Mom will let us go."

2. Kelly: "This darn car won't go."

Spence: "So what? Even if you got it started, there's nowhere to go."

3. Vivvy: "Let go my sweater!"

Chuck: "Only if you !et me go to the movies with you."

4. Daisy: "When you've got to go, you've got to go."

Liz: "How you go on!"

5. Marcia: "Go fly a kite!"

Melinda: "Go soak your head in a bucket!"

6. Huck: "Are you going to go swimming?"

Tom: "Yeah, but I don't yet know where I'm going to go."

7. Jocelyn: "The actors are going out on the stage."

Gil: "I guess the play is going to start."

8. Watson: "We really should find the criminal, but we've nothing to go on." Sherlock: "Oh, go on, Watson, there are clues all around."

9. Hulk: "Nine miles out of ten on this road are stop and go."

Luke: "That's a good road not to go on."

10. Spud: "How are things going for you at the auction?"

Hud: "Why, they're going, going, gone, that's how they're going!"

ML

EXERCISE: Meaning and differences of meanings

(p. 29, line 10)

What are the differences in meaning of the statements given in each of the following cases?

- 1. Brenda said, "Gerald's my only brother." Brenda said, "Gerald's only my brother."
- 2. Sign: ONLY GIRLS ARE ADMITTED TO THE POOL. Sign: GIRLS ARE ADMITTED ONLY TO THE POOL.
- 3. Boys are greeted only when they arrive. Boys are only greeted when they arrive. Only boys are greeted when they arrive. Boys are greeted when only they arrive.
- 4. Useful books will be given out in more courses this year. Books will be given out in more useful courses this year. More useful books will be given out in courses this year. More books will be given out in useful courses this year.

ML

DISCUSSION PLAN: Believing

(p. 29, lines 12-is)

I.

- 1a. Can you know something without believing it?
- 1b. Can you believe something without knowing it?
- 2a. Can you believe something you doubt?
- 2b. Can you doubt something you believe?
- 3a. Can you understand something without believing it?
- 3b. Can you believe something without understanding it?

II.

- 1. If you say you believe in fair play, does that mean you think
 - a. there is fair play?
 - b. there ought to be fair play?
- 2. If you say you believe in Santa Claus, does that mean you think
 - 1. there is a Santa Claus?
 - 2. there ought to be a Santa Claus?
- 3. If you say you believe in ghosts, does that mean you think
 - a. there are ghosts?
 - b. there ought to be ghosts?
- 4. If you say you believe in honesty, does that mean you think
 - a. people are honest?
 - b. people ought to be honest?

DISCUSSION PLAN: Belief

(p. 29, lines 13-16)

- 1. What reason do you have for believing that you're now wearing shoes?
- 2. What reason do you have for believing that you're now reading (or listening to) this question?
- 3. What reason do you have for believing that you're now thinking?
- 4. What reason do you have for believing, during the night, that the sun is on the other side of the earth?
- 5. Do you have any reason for believing that bears like porridge?
- 6. Do you have any reason for *not* believing in giants?
- 7. Do you have any reason for *not* believing in elves?
- 8. Could you believe something to be false, and then discover it to be true?
- 9. Could you believe something to be true, and then discover it to be false?
- 10. Could your belief turn out to be false, even though you had lots of reasons for believing it?
- 11. Could your belief turn out to be true, even though you couldn't think of any reasons for believing it?
- 12. Could a person try to get you to believe something untrue, and still be your friend?
- 13. Could a person who is not your friend try to get you to believe something true?
- 14. Would you like all your beliefs to be true beliefs?
- 15. Is make-believe true, false, or neither true nor false?

DISCUSSION PLAN: Words

(p. 30, line 5)

- 1. Arrange the following from the smallest to the largest: paragraphs, letters of the alphabet, books, words, chapters, sentences, language, punctuation marks.
- 2. Can letters of the alphabet be both true and false?
- 3. Can words be either true or false?
- 4. Can some sentences be both true and false?
- 5. Could there be sentences which are *neither* true nor false?
- 6. Do you sometimes have thoughts for which there are no words?
- 7. Do you sometimes invent words that have no meaning at all?
- 8. Do you sometimes invent words that have meaning just for you?
- 9. Are words invented by the people who make up dictionaries?
- 10. Are the meanings of words invented by the people who make up dictionaries?
- 11. Are there good words and bad words?
- 12. Are there right words and wrong words?
- 13. Are there beautiful words and ugly words?
- 14. Are there smart words and stupid words?
- 15. Are there words you love and words you hate?
- 16. Does a beautiful story have to be made up of beautiful words?
- 17. Does a beautiful story have to be made up of good words?
- 18. Does a beautiful story have to be made up of the right, words?
- 19. Does a true story have to be made up of beautiful words?
- 20. Does a true story have to be made up of the right words?

ML

EXERCISE: Constructing spatial relationships

(p. 30, line 5)

This exercise is for classrooms that have moveable desks.

Remove every desk from the classroom. Leave the room this way for some time. Each student should do some work alone in the empty room. Then all the students should form a circle and sing two songs in the empty space. While still in the circle, ask some of the children if there was any difference in the way they felt doing work in an empty space and doing work in a room full of desks.

Then two children should go out, get their desks and bring them back into the classroom. They should place them wherever they like. The next two children should bring their desks back and place them *in some relation* to the first two desks. This should continue until all the desks are back in the room.

Have two students go to the side of the room, two to the front of the room and two to the back of the room. At each spot, ask each student what shape the desks make.

AMS

Episode 2

Consciousness and its objects

In the beginning of the episode, Miranda tells Pixie that she can think and get dressed at the same time. Apparently, she means that it is possible to think of things other than just the things one is doing. Pixie pretends not to hear Miranda and proceeds to analyze her own consciousness. She notes that each of her reflections has an object. She is not merely thinking in a void. She is thinking about people getting out of bed, putting on their clothes, having breakfast, and preparing to go to school.

Are we always conscious of something?

It is not clear that Pixie would go on to argue that all consciousness is consciousness *of something*. She apparently thinks it is wonderful that she can think of these people and the things they are doing. "And here I am, lying in bed thinking about them." In a sense, she is recreating the world.

Spatial and temporal relationships

Miranda points out that such thinking presupposes that there are spatial relationships. She adds that there are also such things as temporal relationships. Examples of a spatial relationship are "close to" and "far from." "Later than" would be a temporal relationship. Miranda's answer to Pixie's claim that space and time are just *words* is contained in 12 to 14 on page 31. "When we talk about time, we mean earlier than and later than. When we talk about space, we mean near and far." For the first time, Pixie understands what Miranda has been saying and it is a revelation. Space and time are not empty words; they deal with relationships. As Pixie says, "Space is made up of space relationships and time is made up of time relationships." What is not clear to Pixie at this point is the relationship between *space* and spatial relationships. Is space the *class* of spatial relationships? Is it the *family* of spatial relationships? Or is it some kind of context whose members are space relationships? These possibilities have yet to be explored.

DISCUSSION PLAN: Thinking and relationships

(p. 30, line 17)

- 1. When you think, can you think of *things without relationships?* For example, can you think of your bed without thinking of it in relationship to your room, or to you?
- 2. When you think, can you think of *relationships without things?* For example, can you think of equality without thinking of things that are equal to each other? Can you think of unfairness without thinking of people who are unfair to one another?
- 3. When you think, can you avoid thinking of *either things or relationships?* (If so, can you give an example?)
- 4. When you think, can you think of *both things and relationships*? For example, can you think of a friend of yours, and at the same time, think of that person's relationships to you, to his room at home, to his school, to his family, etc.?
- 5. Is thinking a matter of discovering relationships?

ML

EXERCISE: Relationships (explicit and implicit) and parts of speech (p. 30, lines 20-26)

Relationships can be expressed by symbols, and these symbols do not have to be words. For example, there are arithmetical relationships *less than, greater than,* and *equal* (< > and =).

However, we do generally try to express relationships by means of language. The parts of speech operate differently in this regard. *Nouns* usually serve to indicate things—that which is related. Relationships themselves are most frequently indicated by means of *verbs*, *adjectives*, and *adverbs*, or combinations of these, with some occasional assistance from prepositions.

For example, consider what Pixie is thinking about "at this minute":

everyone's getting out of bed

putting their clothes on

having breakfast

getting ready to go to school

Isabel is brushing her teeth

Willa Mae is eating a piece of toast Brian is tying his shoelaces

When we examine a sentence, we do not have to stop at the identification of the various parts of speech it contains, or at the alternative meanings each word may have. We can also perform a useful analysis if we unpack the relationships indicated by the sentence. For example, take the sentence:

Henry ironed his shirt.

The nouns in the sentence are *Henry* and *shirt*, and they explicitly indicate a particular person, Henry, and a thing, the shirt, between whom there is a relationship expressed by the verb *ironed*. (The relationship remains even if we switch it to passive voice, provided we also reverse the terms; thus, "The shirt was ironed by Henry.")

Implicitly, however, there is a third thing in the sentence: the iron. And therefore additional relationships are suggested: of Henry to the iron, and of the iron to the shirt.

See if you can identify, in the following sentences, the relationships that are explicitly indicated and those that are implicitly suggested.

- 1. Mary is walking the dog.
- 2. The batter hit the ball.
- 3. The cat scratched at the door.
- 4. Eddie thought of the circus.
- 5. Jordan threw a stone in the pond.
- 6. Wally and Alice held hands.
- 7. Everyone in the class shared the cake.
- 8. Jack and Jill went up the hill.
- 9. The moon glared at the sun.
- 10. The magician picked a card from the deck.

In the above examples, you are working with nouns and verbs, so that the relationships, whether explicitly indicated or merely suggested, are of a single kind. However, another sort of relationship enters the scene when adjectives or adverbs are employed. Adjectives, of course, are parts of speech that modify nouns, and adverbs modify verbs. Here are some examples of relationships expressed by means of adjectives:

The earth is larger than the moon.

The bus was noisier than a machine gun.

The rose was redder than the carnation.

The above cases are obviously comparisons, and these comparisons are explicit. But the comparisons may be implicit. For example, if someone refers to "the large house on the corner," obviously there is an implicit comparison with other houses; to say "the rose is pink" implies a comparison with roses that are white and red.

What comparisons are implied in the following sentences:

- 1. Terence was playing with a small dog.
- 2. The sea is calm tonight.
- 3. As the storm approached, the air grew heavier.
- 4. From the house, there was a clear view of the city.
- 5. Jeff's thinking with regard to girls was very muddled.

Similarly, we can consider adverbs as explicitly or implicitly making comparisons:

- 1. George objected vigorously to the proposal.
- 2. Albert fought the lion bravely.
- 3. Ruth's parents looked at her proudly.
- 4. The men cruelly mistreated the bird.
- 5. Wilma easily outdistanced the boys chasing her.

Can you say what the implicit comparisons are in each of the above cases?

ML

EXERCISE: Moving things

(p. 30, lines 20-25)

While you are at home, think of something that should be in a different place in your house. Move the object from the one place to the other. Now, in a single sentence, tell what you did.

Afterwards, the class should gather all the sentences together, and make a group poem out of them.

You might want to appoint someone "Editor" to decide on the order of the sentences in the group poem. Or you might, as a group, decide on the order.

EXERCISE: Discovering relationships

(p. 30, lines 20-26)

I.

Take a blank sheet of paper and with a piece of crayon or some paint make a spot near the center of the paper. Now,

- 1. What are the relationships between the spot and the edges of the paper?
- 2. What is the relationship between the color of the spot and the other colors you know?
- 3. What is the relationship between the shape of the spot and the shape of the page?
- 4. Can you think of a spot without relationship to anything at all?

II.

Think of a thing of some kind: a whistle, a stick of bubble gum, a blackboard, a bus, a building.

- 1. What are the relationships between the parts of the thing and the whole of the thing?
- 2. Are there relationships between one part of the thing and the other parts of the same thing?
- 3. Are there relationships between the parts of the thing and the parts of other things?

ML

EXERCISE: Ambiguities

(p. 31, line 1)

- 1. Ginny: "Would you rather a lion ate you or a tiger?" Paul: "I really don't think it would be my decision in either case."
- 2. Newspaper report: "Although hazy, the weather forecast indicated there was a chance of rain."
- 3. School newspaper: "There will be a new series of assembly programs, beginning with Mr. Davis teaching juvenile delinquency."
- 4. School newspaper: "In the second assembly program, Dr. Fisher will discuss poisons which children may drink at home."
- 5. Irv: "Did you see that man-eating fish in the aquarium?" Wilma: "No, but I saw one once in a seafood restaurant."
- 6. Ginger: "I understand Pookie lost her parents yesterday."

Cookie: "Oh, no! In an accident?"

Ginger: "No, in a department store."

7. Rock star: "You ever make records?" Track star: "I just break them."

8. Store owner: "I'll hire you if you prove to me you're a responsible person."

Martin: "Well, whenever anything goes wrong at my house,

everyone points at me and says, 'You're responsible'!"

ML

EXERCISE: Contrasting relationships

(p. 31, lines 1-4)

1.	Look at yourself in the mirror tonight. Tomorrow morning, look a yourself again. Now, complete the following sentence:
	Last night, I looked like;
	this morning, I looked like
2.	Describe the difference between the tastes of two different soft drinks:
	tastes like,
	but tastes like
3.	Describe the difference between taking a shower and a bath:
	Taking a shower is like,
	but taking a bath is like MI

EXERCISE: "As if" analogies

(p. 31, line 15)

Pixie remarks, as she grasps what Miranda means, "it was as if a light went on in my head."

There are two things to be noticed here. First, there is an implicit analogy: seeing what you mean is like having a light go on in my head. The analogy is implicit because it has to be reconstructed in order to take the usual shape of an analogy.

Secondly, the use of the "as if" raises this question: is it possible that *all* analogies can be understood as hypotheticals? In this particular case, it might read, "if I see what you mean, then a light goes on in my head." This is one way of understanding analogies. Let's see how well this approach would work with some particular examples. Here are some analogies; can you reconstruct them in the form of "if... then..." statements?

Example:

Kittens are to cats as puppies are to dogs.

Reconstructed version: If kittens are the offspring of cats, then puppies are the offspring of dogs.

- 1. 3 is to 6 as 5 is to 10.
- 2. Typewriter keys are to typewriters as piano keys are to pianos.
- 3. House keys are to houses as ignition keys are to cars.
- 4. Cartons are to milk as bags are to potatoes.
- 5. Butter is to toast as syrup is to pancakes.
- 6. Rain is to puddles as snow is to snow drifts.
- 7. Eating is to feeling full as not eating is to feeling hungry.
- 8. Love is to hate as hope is to despair.
- 9. Peanuts are to elephants as milk is to cats.
- 10. Colors are to artists as tones are to composers.

Note that, as you try to reconstruct these into "if... then..." form, you are *compelled* to state the relationships which are being compared. You are forced to spell out, "If 3 is half of 6, then 5 is half of 10." And "If rain is the *cause of* puddles, then snow is *the cause of* snow drifts."

ML

EXERCISE: Space relationships

(p. 31, line 17)

Needed: a bunch of stickers or seals

a ball of string a box of balloons

I. Each person must pick two objects in the class which seem to have a relationship to each other.

For example: The door *is-across from* the window.

The chair *is alongside* the desk. The floor is *under* the table.

The blackboard is near the closet.

Now, cut a piece of string to fit between the two objects, and fix the two ends of the string to the objects, using the seals.

Finally, tell the class what the relationship is that you have in mind.

II. Each person take a balloon.

The first person blows up his balloon and lets it go. He then cuts a string the length of the balloon's trip, pastes one end, with a sticker, where he was standing when he !et the balloon go, and the other end where the balloon landed.

The next person lets his balloon go from where the first balloon landed, and continues with the string process. Everyone else does the same, in turn.

Result: Perhaps a string composition. Or perhaps a high-strung class.

Episode 3

(pp. 32-33)

Examples of relationships

When Mr. Mulligan is first asked by Pixie what a relationship is, he tells her it's "a connection." Then, perhaps because he feels some uncertainty about the adequacy of his reply, he asks the others. A number of members in the class then offer examples: Isabel suggests family relationships, Rusty mentions numerical relationships, Jennie speaks of verbal relationships, Tommy points out that things have relationships and gives part-whole relationships as his examples, and Robert discusses the relationships that words have with things. Robert's illustrations are "denotational," that is, his words indicate or refer to some particular object or set of objects in the world. (The "denotation" of "skyscraper" is the Empire State Building, the Chrysler Building, the Hancock Building, the Sears Tower, and so on. The "designation" of the word "skyscraper" is "a very tall building with a steel structure.")

How are relationships to be defined?

Pixie is not satisfied. She admits that the examples were good ones. But she implies that examples are not equivalent to a definition, and says that she still wants to know what relationships are. Pixie's point is a perfectly legitimate one. She seems to be saying: If I want to know what the word "city" means, it is not enough just to name a few cities. What I want is a definition, that is, I want to know the essential characteristics of a city.

Pixie's denial that others are contributing to the inquiry

At this point, there is no answer for Pixie. Mr. Mulligan seems prepared to go back to his term "connections," but Pixie doesn't seem ready to accept this either. She then says, "I have to figure everything out for myself." In view of the ample help she has been receiving from the class and Mr. Mulligan, Pixie's claim seems rather odd. Doesn't she see that the class is becoming a community of inquiry? Why does she refuse to acknowledge the contributions of others?

EXERCISE: Types of relationships

(p. 32, lines 3-21)

The five members of the class identify five different types of relationship:

Isabel: family relationships

Rusty: numerical relationships Jenny: verbal relationships

Tommy: part-whole relationships among things Robert: word-thing (semantic) relationships

But there still remain seven members of the class who haven't offered examples. They are Kate, Neil, Geraldo, Chita, Willa Mae, Brian and Pixie. Can you think of types of relationships which they might have suggested? And for each type, how many examples can you give?

ML

EXERCISE: Sentences

(p. 32, line 12)

In general, there are two kinds of sentences:

- (1) those that are either true or false (usually known as *statements* or *assertions*)
- (2) those that are neither true nor false (e.g., *questions, commands, exclamations*) Classify the following:

		assertion	question	command	exclamation
1.	Clyde: "Oh, how I hate to get up in the morning!"				
2.	Mitzi: "Can my eyes change from brown to blue?"				
3.	Sid: "The rain is heavy in Hawaii."				
4.	Pam: "Okay, fourth-graders, line up at the door!"				
5.	Tad: "George Washington was born in China."				
6.	Francine: "It's Tuesday, isn't it?"				
7.	Jed: "What a home run that was!"				
8.	Cliff: "Don't talk, listen!"				
9.	Andy: "A wet bird never flies backwards."				
10.	Annette: "Aren't we ever going to get to Chapter Six?"				

EXERCISE: Part-whole relationships

(p. 32, lines 15-16)

Complete the following:

- 1. If a wheel is part of a bicycle, then a runner is part of a ______.
- 2. If a shoelace is part of a shoe, then a button is part of a ______.
- 3. If a wallboard is part of a wall, then a _____ is part of a floor.
- 4. If a letter is part of a word, then a feather is part of a _____.
- 5. If a tabletop is part of a table, then a ______ is part of a desk.
- 6. If a second is part of a minute, then a minute is part of an ______.
- 7. If an inch is part of a foot, then a _____ is part of a yard.
- 8. If a quart is part of a gallon, then a _____ is part of a pint.
- 9. If ice cream is part of an ice cream soda, then milk is part of a ______.
- 10. If an anchor is part of a boat, then a gangplank is part of a ______.

ML

EXERCISE: Words and things

(p. 32, line 18)

- 1. Is "word" a word?
- 2. Is the word "cat" a cat?
- 3. Are cats words?
- 4. Is "cats" a word?
- 5. Does the word "cat" have fur?
- 6. Is this a cat or a picture of a cat?



- 8. Is "cat" a word or a picture of a word?
- 9. Is word-or a picture of the word "word"?
- 10. Is this a picture of a cat or a picture of a picture of a cat?
- 11. This is a cat from the other side. What does a word look like from the other side?
- 12. What is the relationship between cats and the word "cat"?
- 13. What is the relationship between words and the word "word"?

EXERCISE: Can examples serve as definition?

(p. 32, lines 24-25)

Pixie complains that even though her classmates have offered good *examples* of relationships, she still doesn't know what relationships are.

What she is saying is that examples are not equivalent to a definition.

Still, given examples, one might begin to think of ways to construct a definition.

• A particular Ford or Chevrolet (or any other make) is an *example* of an automobile.

A dictionary definition of "automobile" is "a road vehicle driven by mechanical power."

In the following cases, if the definition is given, give examples, and if examples are given, figure out the definition.

Word	Definitions	Examples:
spaceship	an aircraft capable of going beyond the earth's gravitation	
president	chief executive officer of the United States	
millionaire		Rockefeller, Morgan, Ford
nation		France, Germany, Japan
food	nourishing things one can eat	
		MI.

EXERCISE: Figuring things out

(p. 33, line 4)

In the column on the left is a series of questions. But you don't have to answer the questions. All you have to do is say whether the things that are talked about can be figured out or not.

For example, "How much is two plus two?" poses a problem that can be figured out. But "Do unicorns wear green socks?" can't be figured out.

		Can be figured out	Can't be figured out	?
1.	Wanda: "How many straight lines are there in a circle?"			
2.	Vera: "How many points are there in a line?"			
3.	Ruth: "Is truth yellow or green?"			
4.	Chuck: "Will the first day of next year be a Tuesday?"			
5.	Dan: "Which is more greasy, love or hope?"			
6.	Sal: "What country is directly south of the United States?"			
7.	Frank: "Which is colder-water or iron?"			
8.	Mandy: "What's the difference between a ladybird and a firefly?"			
9.	Trudy: "If I'm not a citizen, how old do I have to be in order to vote?"			
10.	Oscar: "Is fun fun?"			

EXERCISE: Figuring things out for yourself

(p. 33, line 4)

Directions: Indicate whether the following would be items that you would want to figure out for yourself, or whether they are things which you would ask someone else about. Then tell the class why you answered as you did.

		Want to figure out for yourself	Want someone to give you the answer	
1.	The spelling of a word.			
2.	The answer to a long division problem.			
3.	The name of the 4th President of the U.S.			
4.	Something you would like for your birthday.			
5.	The title of your short story.			
6.	How to play the card game, Rummy.			
7.	Why does it turn dark in the evening?			
8.	Do U.F.O.s exist?			
9.	The rules of baseball.			
10.	What is a friend?			
11.	Your favorite story.			
12.	How do we come to know something?			
			A	AMS

EXERCISE: Space and time relationships (p. 33, line 25)

Make up sentences using the following words or phrases that indicate space or time relationships:

Space Relationsl	nips	Time Relationships	
under	close to	before	
over	distant from	after	
higher than	at the center of	shortly before	
lower than	at the edge of	shortly after	
to the left of	in the middle of	long before	
to the right of	towards	long after	
above	away from	preceding	
below	in the same direction as	following	
near	on a level with	at the same moment as	
far	from the opposite direction	once upon a time	
	• •	·	ML

(pp. 34-36)

The relationship of "standing for"

Now that the children are taking relationships seriously, Brian apparently has been thinking of some way of expressing relationships. Presumably it is not enough to talk, as Robert did on page 32, of the word "mountain" having a relationship to all the mountains around. Brian wants to symbolize the word "mountain," the mountain itself, and the relationship obtaining between the two. So he draws an arrow to express the relationship of "standing for." The word "mountain" represents or *stands for* mountains, and the arrow *stands for* the representational relationship.

Mr. Mulligan's analogy

Brian proceeds to demonstrate on the blackboard that the word "relationships" is related to "far and near" and "before and after." In fact, Mr. Mulligan presents the matter in the form of an analogy to which Brian assents: The word "relationships" is to "far and near," or "before and after," the way the word "mountain" is to real mountains.

Where are relationships located?

Pixie now demands to know where relationships are located. She begins by assuming that words and ideas are "in our minds," while mountains are "in the world." Mr. Mulligan guardedly admits that this is one way of expressing the matter.

Spatial and temporal relationships

Pixie proceeds to argue analogously that the word "relationship" and the idea relationship, are "in our minds," but that "real relationships" are in the world. Apparently she is saying that space and time can be understood as real if they are understood as sets of "real" relationships.

Pixie's analogy

But Pixie is still not finished. It is not enough for her to have leaped to the idea that space and time are made up of relationships; she proceeds to reason that our minds must likewise be made up of the words and ideas

that stand for those real relationships. As Mr. Mulligan says, "A very nice analogy, Pixie."

Is mind a dimension?

Mr. Mulligan rushes off, but not before introducing still another concept into the discussion. As he leaves, he mutters, "Space and time are dimensions. But could the *mind*—" He does not finish his speculation. Was he wondering whether the mind was a dimension? This word "dimension" is most familiar to us in instances such as "height," "weight," and "breadth". But height, weight, and breadth do not have existence in and of themselves. There are only things which, when measured, turn out to be tall, wide or deep. Likewise, Mr. Mulligan may be wondering whether the mind has any existence in and of itself, and is considering the possibility, suggested by Pixie, that "mind" is a name for the relational context of our thoughts.

DISCUSSION PLAN: Relationships

(p. 34, line 4)

ML

- 1. What is a relationship between a cottage and a castle?
- 2. What is a relationship between adding and subtracting?
- 3. What is a relationship between weeks and months?
- 4. What is a relationship between Paris and France?
- 5. What is a relationship between ice and steam?
- 6. What is a relationship between alcohol and drunkenness?
- 7. What is a relationship between turning around and dizziness?
- 8. What is a relationship between the speed of sound and the speed of light?
- 9. What is a relationship between vanilla ice cream and chocolate syrup?
- 10. How are relationships different from things?
- 11. How are relationships like things?
- 12. If there were no things, could there still be relationships?
- 13. If there were no relationships, could there still be things?
- 14. Is it possible for there to be a thing without any relationships?
- 15. Can a thing have relationships within it? Can you give an example?

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EXERCISE: Ideas (p. 34, line 6)

Whatever a person thinks is a *thought*.

An *idea* is a special kind of thought. It is a possible way of solving a problem. (Ideas often take the form "If..., then..." or contain the word "if".)

In addition to ideas, there are many other kinds of thoughts. For example, there are *memories* (our thoughts of what has already been) and *imaginings* (our thoughts of what could possibly be).

How would you classify the following thoughts:

			ideas	memories	imaginings	other
1	l.	Hansel: "Gretel, I think we'll be able to find our way back if we drop pebbles behind us."				
2	<u>2</u> .	Aladdin: "If I rub the lamp again, maybe the genie will come back."				
3	3.	Alice: "I wonder what's on the other side of the looking glass."				
2	1.	Jack: "I'll bet these beans will grow into a beanstalk as high as the sky."				
Ę	5.	Lion: "Why, bless my soul, it's Androcles! How could I ever forget?"				
6	6.	Beauty: "Beast, will you let my father go if I promise to marry you?"				
7	7.	Charlotte: "If you want to catch insects, spin a web."				
8	3.	Tailor: "All the world knows how I once killed seven at a blow."				
Ç).	Owl: "What in the world is a runcible spoon?"				
1	10.	Pobble: "Maybe if I wear my scarf, I won't lose my toes."				

EXERCISE: Mind (p. 34, line 18)

The word "mind" can mean "intellect" (as when we say, "She has a fine mind.") It can also be used as a verb, to mean "to care" (as when we say, "Never mind.") or, to mean "to pay attention to" (as when we say, "Mind your own business.")

Look at each of the following, and decide if it means (a) intellect, (b) to care, (c) to pay attention to, or (d) something else.

		intellect	to care	to pay attention to	something else
1.	"She read my mind."				
2.	"Mind over matter."				
3.	"Mind your p's and q's."				
4.	"I don't mind if I do."				
5.	"I'll give him a piece of my mind."				
6.	"My mind is made up."				
7.	"I have a mind to complain to the manager."				
8.	"She always has boys on her mind."				
9.	"I've got to mind the baby."				
10.	"This computer has a mind of its own."				

ML

EXERCISE: "See" (p. 35, line 2)

The word see has a number of meanings, but two of its most familiar and most important are:

- 1. to perceive by means of one's eyes
- 2. to understand

Which of the two meanings just mentioned is intended in each of the following:

		to perceive	to understand	?
1.	"Oh, say, can you see, by the dawn's early light"			
2.	"Oh, now I see!" said the blind man.			
3.	"Once I was hit on the head," said Rudy, "and I saw stars."			
4.	"When it's pitch dark," said Rilla, "you can't see a thing."			
5.	"The man talked and talked," said Irving, "but we couldn't see what he was getting at."			
6.	Jody's father rubbed his chin and said slowly, "Now let me see"			
7.	As the boy was getting ready for the operation, the nurse heard him say, "Now let me see"			
8.	George called through the door, "My sister refuses to see you!"			
9.	Maisie tried on the aviator's goggles and said, "I don't understand how you can see with these things!"			
10.	Maisie tried on the driver's gloves and said, "I don't see how you can drive with these things!"			

EXERCISE: "Stand for"

(p. 35, line 8)

The phrase "stand for" can mean many different things. In each of the following examples, a number of possible meanings are suggested. Choose those which you think would be most appropriate.

- 1. "Johnny, don't tease your sister," said Mrs. Jones. "I won't *stand for* it!" (put up with) (support) (deserve) (rise for)
- 2. Ellen remarked, "in my opinion, words *stand* for things." (stand up for) (represent) (endure) (tolerate)
- 3. "The American flag," said Jim, "is something I'll always *stand for.*" (raise) (salute) (rise for) (endure)
- 4. The grocer said to his helper, "Pick those tomatoes off the floor- what do you think we have a stand for?"
 - (what do I have to put up with?) (what do tomatoes represent?) (what do you think is the purpose of this stand?) (none of these)
- 5. "You should elect me because I *stand for* justice," said the politician. (represent) (believe in) (fight for) (all of these)

ML

EXERCISE: Mind and analogy

(p. 35, lines 8-13)

Pixie says that, if space and time are made up of relationships, maybe our minds are made up of the words and ideas that stand for those relationships. As Mr. Mulligan says, she's making an *analogy*. An analogy is a comparison of one relationship to another. It's a relationship between two relationships.

For example, someone could say:

The relationship between the hand and its finger is the same as the relationship between the foot and its toes.

Or, to put it more simply:

Hands are to fingers as feet are to toes.

An analogy is *good* when the relationships being compared are strongly similar. An analogy is *not good* when the relationships being compared are not much alike. Would you say the following analogies are good or not good?

- 1. My mind is to my body as air is to earth.
- 2. My mind is to my body as nothing is to something.
- 3. My thoughts are to my brain as voices are to a telephone.
- 4. My mind contains feelings the way an ocean contains waves.
- 5. My thoughts move in one direction as a river flows in one direction.
- 6. My thoughts are in my mind the way air is in my lungs.
- 7. My fears and hopes are in my mind the way crocodiles and giraffes are in a zoo.
- 8. My mind is in my brain the way my tongue is in my mouth.
- 9. My mind contains my thoughts the way a fishbowl contains fish.
- 10. My mind is to my brain as light is to alight bulb.

EXERCISE: Exact and inexact comparisons of relationships

(p. 35, lines 10-13)

I. Which of the following comparisons are exact and which are inexact? In the case of inexact comparisons, can you *say in which* respect the comparison is being made?

		Exact	Not Exact	?
1.	Fathers are to sons as older brothers are to younger brothers.			
2.	2 is to 4 as 4 is to 8.			
3.	One roller skate is to another as one ski is to another.			
4.	Chairs are to tables as knives are to forks.			
5.	Squares are to circles as rectangles are to ovals.			
6.	Balloons are to blimps as gliders are to airplanes.			
7.	Leaves are to trees as bricks are to houses.			
8.	Concrete is to highways as steel is to bridges.			
9.	Letters are to envelopes as pages are to books.			
10.	Boys are to girls as men are to women.			

- II. Make up five more exact comparisons of relationships.
- III. Make up five more inexact comparisons of relationships.

ML

EXERCISE: Inexact comparisons of relationships

(p. 35, lines 10-13)

I. Which of the following seem *right* to you, and which do not? In which respect do they seem right? In which respect do they seem wrong?

?

II. Construct 10 more inexact comparisons of relationships. Five should seem right and five should not.

DISCUSSION PLAN: Dimensions

(p. 35, line 21)

- 1. There are many things, like ladders and flagpoles, that are *long*. But is there such a thing as *length*?
- 2. There are many things, such as the Atlantic and Pacific oceans, that are *wide*. But is there such a thing as *width*?
- 3. You take up space. Your school takes up space. Every physical object takes up space. Still, is there such a thing as *space?*
- 4. You spend time doing your homework. You take time to eat. You pass time in school. But is there such a thing as *time*?
- 5. Suppose you measure a board and find that it is 1/2" thick, 8" wide, and 2" long. Are those its *dimensions*?
- 6. If length and width are dimensions, could it be that space and time are also dimensions?
- 7. If space and time are the dimensions in which things happen, could *mind* be the dimension in which thoughts happen?
- 8. Could you prove there is no such thing as space or time?
- 9. Could you prove there is no such thing as mind?
- 10. Choose one of the positions that follow, and give your reasons for supporting it:
 - a) there is no such thing as mind;
 - b) mind is a dimension;
 - c) mind is some kind of stuff, but it is a stuff very different from that which the body is made of;
 - d) mind is some kind of stuff, but it is the same kind of stuff that the body is made of.
- 11. Is it possible that length and breadth are real, but space (as a dimension) is an analogy?
- 12. Is it possible that space and time are real, but mind (as a dimension) is an analogy?

ML

Teacher Self-Evaluation Chapter Five

- 1. Do my students perceive me as puzzling, inquiring, and/or wondering during discussions?
- 2. Are my students expressing their *own* ideas in poetry, prose, dance, or art?
- 3. Do each of my students understand part-whole relationships?
- 4. Are my students more open with each other? With me?
- 5. Do my students understand what is meant by time relationships and space relationships?
- 6. Do each of my students appear to be progressing in drawing correct inferences from what each other says?
- 7. Am I ready to have one of my students direct the discussion tomorrow? Why? Why not?
- 8. Do my students understand analogies? How do I know?
- 9. Am I still talking too much?
- 10. Am I more aware of what is involved in the method of inquiry?

CLASS	CLASSROOM DIALOGUE						
Date		-					
Topic							

WHAT THE STUDENTS ACCOMPLISHED DOING THIS CHAPTER

EXERCISES IN THIS CHAPTER THAT WORKED

Specific Skills Taught	REASON THEY WORKED
Specific Skills Reenforced	
Specific Skills to Work on in the future	

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CHANGES I WOULD MAKE NEXT TIME I DO THIS CHAPTER		OTHER SOURCES THAT RELATE TO THEMES IN THIS CHAPTER
	CORRELATED EXERCISES I WOULD USE	CHILDREN'S LITERATURE
		Stories
		Play
		MOVIES
		ART WORKS AND PROJECTS
		MUSICAL COMPOSITIONS AND PROJECTS
		DANCE EXERCISES
		OTHER

OVERLAPPING THEMES FROM THIS CHAPTER WHICH OCCUR IN OTHER DISCIPLINES I TEACH

CHAPTER SIX

Episode 1

(pp. 37-40)

Serration

Pixie is trying to put herself to sleep, and she does so by a peculiar method. Instead of counting sheep, she gives herself seriation exercises. Seriation is one of the basic thinking skills to which children are introduced in this program. Seriation is a logical skill which can contribute greatly to success in working with orders of any kind, particularly in mathematics. It also would be relevant to historical understanding and to any kind of effective planning. Pixie may be very good in seriation, but she confuses this Wednesday and next Wednesday, resulting in the little adventure described in this episode.

Pretending and appearing

Pixie wakes up at 4:30 in the morning and is unsure whether Miranda is really asleep or merely appears to be asleep. If she merely appears to be asleep, then she may be pretending. In this case pretending and appearance go hand in hand. Perhaps a more relevant issue would be the relationship between pretending and make-believe. Say to a child "Make believe you're a crocodile," and he'll proceed to imagine himself a crocodile and act out the part. He'll throw himself into the role. But if one says, "Pretend you're a crocodile," the child may do what was asked with a divided consciousness. He'll continue to be aware of himself as a child pretending to be a crocodile. Pixie wouldn't say that Miranda is making believe that she's asleep. She says rightly that she didn't know if Miranda was *pretending* to be asleep.

Are there colors In the dark?

Pixie begins to get dressed in the dark and immediately finds that she is unable to tell what color her socks are. Her problem has a dual aspect: On the one hand, it is difficult to know if one is putting on matching socks. On the other hand, one can't help wondering if objects retain their colors in the dark. Is the grass green at night? Is a green sock green at night? Obviously, Pixie is off to a bad start.

A perceptual error is Interpreted as a change In the world

She now runs into a problem with her shoes or, rather, with her feet. Her interpretation is not that she has put on two right shoes, but that she has suddenly acquired two right feet because her left foot has turned into another right one. It is not at all unusual, in a dream, for parts of the world to change rapidly into one another. Pixie is not actually dreaming, but she is only half awake. It doesn't occur to Pixie that there is an alternative explanation. Perhaps the change is in her perception and not in her feet. As she says at the top of page 39, "But now I was stuck with two right feet." Obviously, Pixie lives in a world in which such things can happen at any moment.

The locus of the self

When Pixie tries to wake her mother, she goes so far as to lift one of her mother's eyelids and ask, "Momma, are you in there?" Pixie's conception of the location of her mother's self is as problematical at this point as the conception of her own body. Perhaps very young children, much younger than Pixie, might commonly conceive of the self as a tenant in the body. In her bewilderment, Pixie seems to have regressed to a world where normally stable things are flexible and where people are parts of their bodies.

Pixie performs an encore

Pixie has the same experience again with a shoe that does not fit. Once again she blames her difficulty on a change in her feet. It remains for her father to explain the situation.

Pixie's perplexities

One wonders why Pixie would tell anyone this whole episode. She reveals her. own confusing experiences very straightforwardly. The way in which she relates this episode may cause the reader to be amused at her expense, but her objective is not to make fun of herself. Rather, her concern is to show how perplexing a person's experience can be. Pixie wonders at the world. There are times when people make the world more enigmatic and more puzzling than necessary. But for Pixie this tendency is just something else to be wondered at, and she can't help telling others about it.

DISCUSSION PLAN: Going to sleep

(p. 37, line 2)

- 1. When you go to bed, do you go to sleep right away, or does it take you a while to fall asleep?
- 2. Do you like to sleep, or would you prefer to stay awake all the time?
- 3. What is sleep?
- 4. Suppose Pixie said, "I was wide awake. The clock said 11 o'clock. A little while later, I looked at the clock and it said 3 o'clock."
 - a. Is it possible Miranda turned the clock ahead for a few hours, and didn't realize it?
 - b. Is it possible that Pixie fell asleep for a few hours, and didn't realize it?
- 5. Is it possible that there are times when you are asleep and don't know it?
- 6. Is it possible that there are times when you are awake and don't know it?
- 7. Can a person be half-awake and half-asleep?
- 8. Have you ever walked in your sleep? If so, were you aware of it while it was happening?
- 9. Have you ever talked in your sleep? If so, were you aware of it while it was happening?
- 10. Have you ever fallen asleep while pretending to be asleep? ML

EXERCISE: Seriation

(p. 37, lines 1-6)

- I. It is Tuesday.
- a. What day is five days from today?
- b. What day was it three days ago?
- c. What day would it be two days before six days from now?
- II. It is February.
- a. What month is four months from now?
- b. What month was it six months ago?
- c. What month will it be two months before six months from now?
- III. The year is 1990.
- a. What year was it nine years ago?
- b. What year will it be nine years from now?
- c. What year was it two years after seven years ago?

ML

EXERCISE: Seriation (p. 37, lines 1-6)

Consider these four columns, each of which is a series:

Α	January	1	1970
В		2	1971
С	February	3	1972
D		4	1973
Е	March	5	1974
F		6	1975
G	April	7	1976
Н		8	1977
I	May	9	1978
J		10	1979
K	June	11	1980
L		12	1981
M	July	13	1982
N		14	1983
0	August	15	1984
Р		16	1985
Q	September	17	1986
R		18	1987
S	October	19	1988
T		20	1989
U	November	21	1990
V		22	1991
W	December	23	1992
Χ		24	1993
Υ		25	1994
Z		26	1995

Let us say that, if we are given three letters, the first will stand for the month, the second for the day of the month, and the third for the year. For example, GTZ stands for April 20, 1995.

- 1. What do the letters QBO stand for?
- 2. What are the letters for today's date?
- 3. What are the letters for 1 year, 1 month and 1 day from now?
- 4. What are the letters for 3 years, 2 months and 7 days ago?
- 5. What are the letters for your birthday?

Suppose the following happened:

Pixie drops her alarm clock on the floor, and it breaks. Her mother sends Pixie and Miranda to the store to get another clock, just like the first one.

In the store, they find a clock that is the same size, is made by the same company, and looks very much the same as the first clock. They buy it and take it home. They plug it in and it runs.

However, the next morning, they return it to the store and obtain a different clock.

Now, can you figure out what went wrong? What did they discover at night that they didn't notice during the day? When they decided, the first time they were in the store, that the two clocks were the same, what had they failed to take into account?

Write two or three sentences in answer to the above questions.

ML

EXERCISE: Mental acts

(p. 38, lines 2, 5, 9, 13, 14, 23)

On this page, we encounter a number of words standing for *mental acts: decided, pretending, know, guess, realized.*

Also, on this page, Pixie uses the expression "it suddenly hit me ..." Does she mean, "I suddenly realized ..."? It would seem so.

In the following exercise, the *down* column lists a number of expressions taken from ordinary language, and the *across* column lists the names of mental acts. Can you match them up? The first one is done for you as an example.

		decide	pretend	know	guess	realize	wonder	consider
1.	"It suddenly hit me"							
2.	"I made up my mind"							
3.	"I am going to weigh the alternatives."							
4.	"I can't help marvel-ling at how large and how beautiful the ocean is."							
5.	"Hippity-hop! I'm a angaroo!"							
6.	"After I think, I choose."							
7.	There are some truths which I am aware of."							
8.	"If I don't know the answer on a test, I go with the best hunch I have."							
9.	"English is my native language. Of course I'm acquainted with it."							
10.	"Before you do it, think of the conse-quences."							

EXERCISE: What goes to sleep?

(p. 38, tines 6-11)

Check whether the thing on the left goes to sleep, doesn't go to sleep, or you don't know.

			Doesn't	
		Goes to sleep	go to sleep	?
1.	The sun			
2.	Grass			
3.	A rose			
4.	Light			
5.	The moonlight			
6.	A tulip			
7.	A bear			
8.	A river			
9.	A tiger			
10.	A sparrow			
11.	A fish			
12.	The rain			
13.	A tree			
14.	A door			
15.	A window			

AMS

EXERCISE: Colors	(p. 38, line 13)
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Tell what color the following things are (1) in the daytime (2) in the night. (lines 12-13)

		Color in the daytime	Color at night
1.	grass		
2.	the sky		
3.	the sheets on your bed		
4.	your bike		
5.	a daisy		
6.	the living-room rug in your house		
7.	your school shoes		
8.	the piano keys		
9.	your best friend's hair		
10.	milk		
11.	the blanket on top of your bed		
12.	a waterfall		
13.	your jacket or coat that you wear to school		
14.	a tree		
15.	snow		
			AMS

DISCUSSION PLAN: Can colors be seen in the dark? (p. 38, lines 13-14)

- 1. Can you see the color of the grass at night?
- 2. Is the grass still green at night?
- 3. If you get a flashlight and shine it on the lawn, and the lawn looks green, does that mean the lawn stayed green in the dark?
- 4. What children's game is it, in which the person who is "IT" closes his eyes and counts to ten. During this period, the players can move. The moment IT opens his eyes, they must freeze, or become IT. The object of the game is to reach "home" safety while IT's eyes are closed. (Now that you've recalled the game, play it.)

DISCUSSION PLAN: Pixie's shoes

(p. 38, lines 17-19)

Pixie tells us she has two pairs of shoes: her everyday ones and her new ones. What more can we infer about her shoes?

			Probably		Probably	Can't
		False	False	True	True	Tell
1.	All four of Pixie's shoes are the same size.					
2.	All four of Pixie's shoes are of different sizes.					
3.	Two of Pixie's shoes are slightly larger than the other two.					
4.	Pixie's shoes are all in the same style.					
5.	Pixie's shoes are all of the same color.					
6.	Pixie's new shoes cost the same as her everyday shoes.					
7.	Two of Pixie's shoes are for left feet and two are for right feet.					
8.	One of Pixie's shoes belongs to Miranda.					
9.	All of Pixie's shoes are made of leather.					
10.	Pixie never wears sneakers.					

ML

EXERCISE: Is the problem with you or with the world? (p. 38, lines 23-25)

Many times, we are confused as to whether the problem we are faced with is caused by something in us or something in the world outside us.

For example, you may (if you wear glasses) think that the wall opposite you is dirty, when in fact there is some dirt on your glasses.

Or (if you turn around and around) you may think that the world is spinning around you, or coming up to hit you in the face.

Or you may think that, as people get further away from you, they get smaller (rather than think that they *appear* to get smaller.)

Pixie puts on the wrong shoes, and instead of putting the blame on the shoes, puts the blame on her feet. But she is only half-awake, and when we are only half-awake, we are very prone to make such mistakes.

How can we re-create conditions like those Pixie is faced with, where our own bodies seem to be out of our control?

Try this:

Divide the class into pairs. Let one person extend his arms, cross them and interlace his fingers. Then bring his two laced hands up under his chin.

Now the other person points to one finger at a time and asks the person with the folded hands to move that finger. (Don't touch the finger you point at!)

This should give you an idea of how the body can sometimes seem uncoordinated or out of control.

If you like, you can each keep score of how many "hits" and how many "misses" each of you makes when called upon to move a finger.

DISCUSSION PLAN: Persons

(p. 39, line 2)

- 1. Can a stone be a person?
- 2. Can a stone sculpture of a person be a person?
- 3. Can a tree be a person?
- 4. Can a cat be a person?
- 5. If an animal has a body and a mind, is it a person?
- 6. If a book made of paper and leather contains a story, is it a person?
- 7. Can a country be a person?
- 8. Is the Tooth Fairy a person?
- 9. Must each person be different from every other person?
- 10. Can a creature from another world be a person?
- 11. Can something that is not a person become a person?
- 12. Can a person become something that is not a person?
- 13. Is it wrong to treat persons as if they were things?
- 14. Is it wrong to treat things as if they were persons?
- 15. If neither you nor anyone else knew who you were, would you be a nonperson?

ML

DISCUSSION PLAN: Where are we?

(p. 39, line 12)

Pixie says, "Momma, are you in there?"

- 1. Is Pixie's mother *inside* her body?
- 2. If Pixie were to look in her mother's eyes when her mother is awake, would Pixie then see her mother?
- 3. Would it be a good analogy to say, "A person lives in his body the way people live in their houses"?
- 4. When we wake up in the morning, would it make sense for us to say, as we open our eyes, "World, are you out there?"
- 5. Would it make sense for Pixie to call out, when she hears a knock on the door, "Isabel, are you out there?"
- 6. Is it possible that a person is *neither* inside his body nor outside his body?
- 7. Is it possible that a person is *both* inside and outside his body?
- 8. When you talk to your friend, and you listen to your friend's voice on the telephone, is your friend's voice in your room?
- 9. If your friend's voice is in your room, is your friend in your room?
- 10. Think of your room at home. Is in now in your mind? If so, is it now in school?

 ML

Episode 2

(pp. 40-42)

Is a model just a small version of something?

A discussion develops in the classroom with regard to the meaning of the word "model." Neil, Tommy, and Isabel agree that models are exactly like the real things they represent. The parts are smaller, but they are the same and the relationship to one another is the same.

Are children models of adults?

Geraldo promptly offers a counterexample: The bodies of children have the same parts; exhibiting the same relationships, as those of adults, but that doesn't make them models. Ask your students why? What is the difference between the kind of models that the children are talking about and persons such as children? Neil, Isabel, and Tommy do not believe that Geraldo's counterexample invalidates their understanding of models. Instead, they take Geraldo's counterexample as a limiting case.

Similar relationships, different parts

At this point, Tommy wonders what would be the case where the relationships are the same but the parts are different. No one seems to be able to think of an illustration. Just then, according to Pixie, Brian "happened to reach up and pull down the map of the United States." Pixie interprets Brian's action as a coincidence rather than as an attempt to offer an illustration. But Chita, Rusty, and Robert are quick to elaborate the point that maps do not have parts like the parts of the terrains they represent. Nevertheless, the relationships of the points on a map to one another are *congruent* with the relationships in the part of the world that is represented by the map.

What are analogies?

Mr. Mulligan tells the class that when two things having the same relationships but different parts are compared with one another, the result is an *analogy*. This is hardly a satisfactory way of defining analogy, because it is more correct to say that an analogy expresses a resemblance between two relationships. Isabel's illustration is quite to the point. The relationship

between a wing and a bird resembles the relationship between a fin and a fish.

Analogies as exact comparisons of ratios

What follows is a volley of examples from different members of the class. Neil and Geraldo begin to argue whether the relationships being compared need merely resemble one another or whether they need to be exactly alike. Robert points out that they could be exactly alike, offering as an illustration, "Two is to four as four is to eight." It is obvious that Robert's .example is an exact comparison of two ratios. The question of whether analogous relationships need be exactly alike is not settled. However, most analogies involve inexact (similar but not identical) comparisons of relationships.

What do we learn in school?

Pixie's last sentence in this episode appears to be ironical. She claims that we find out in school just what it was we were doing all along. The implication is that we don't learn to do different things; we merely become conscious of what we do. We find out what our practice is. Her remark raises a question about what is learned in school. Do students learn alternative ways of making, saying, and doing, or do they learn simply to verbalize what they already do? Pixie seems to be saying the latter. School helps us articulate our existing practices in much the way that a person might be taught that what he speaks every day is prose. Whether or not Pixie is right is open to question.

DISCUSSION PLAN: "This"

(p. 40, line s)

Most words have meanings that consist of things that the words refer to. The word "cat" refers to cats; the word "book" refers to books.

But what about demonstrative pronouns like "this" and "that"? When we use them, we usually know exactly what we mean: *this* table, *this* Friday, *that* water fountain, *that* man with the green sweater. But "this" and "that" are useful to us only in specific contexts, under very specific circumstances.

For example, think of the difference between "a desk" (any desk) and "this desk" (the one you are now sitting at, and have your hands on.) What are the special circumstances that make this desk different from any desk?

Consider the following pairs of sentences, and say whether you think they use the words "this" and "that" in the same ways, or differently.

- 1a. Cora: "This morning I took a shower in ice-cold water."
- 1b. Ben: "Every morning I take a shower in this ice-cold water."
- 2a. Della: "When I arrived in Paris, I said, 'So this is France!' "
- 2b. Abe: "When I arrived in Paris, I said, 'So this is Paris!" "
- 3a. Maurice: "I can't wait for Jay to sing, `This Magic Moment!" "
- 3b. Joanne: "Oh, it's just so wonderful, this magic moment!"
- 4a. Pete (thinking he heard a noise in the middle of the night): "What was that?"
- 4b. Lila (not hearing what was said to her): "What was that?"
- 5a. Paul (rubbing his hands together): "Now, that's more like it!"
- 5b. Wally: "That's what I say!"

ML

EXERCISE: Making room pictures and a room model. (p.

(p. 40, line 19)

- 1. Take five pieces of cardboard, each about the size of a sheet of paper.
- 2. On one piece of cardboard, draw the floor of your room at home. Draw it as if you were looking at it from the ceiling of the room, looking down.
- 3. On the other four pieces of cardboard, draw the other four walls of your room, as they look when you face them.
- 4. Tape the five pieces of cardboard together so that they make a model of your room.

EXERCISE: "Models"

(p. 40, line 19)

State whether you think the word "model" is used in the same way or differently in each pair of sentences:

1. Helen: "Carol was a mode! child."

Kathy: "Yes, and now she's a mode! soldier."

2. Lucille: "When I grow up, I'm going to be a model."

Clyde: "When I grow up, I'm going to buy a !ate model sports car."

3. Gail: "See those boys! They're modeling clothes!"

Dorothy: "And see those boys! They're modeling clay!"

4. Bernie: "Yesterday I built a model airplane."

Mike: "My idea of an airplane is a model of an airplane."

5. Larry: "Tomorrow we're going to visit a model house."

Hilary: "Tomorrow we're going to visit a model farm." ML

DISCUSSION PLAN: Models

(p. 40, line 19)

- 1. Is a toy helicopter an exact model of a regular helicopter, or is it like a regular helicopter only in certain respects?
- 2. Do models have to be man-made, or can natural objects be models?
 - a. Is a pebble a mode! rock?
 - b. Is a sapling a mode! tree?
 - c. Is a child a model adult?
- 3. If a small version of an airplane looks like an airplane but doesn't fly, is it still a model airplane?
- 4. If a toy flies, but doesn't look like an airplane, is it still a model airplane?
- 5. What is the difference between *a model* of the human body and a small' *sculpture* of the human body?
- 6. If a "model" is full-scale (for example, a full-scale model of a space shuttle), is it still a mode!?
- 7. If a "model railroad" is used in a factory to carry small objects, is it still a model?
- 8. How does making a model of something help us understand how that thing works?
- 9. How can a model cause us to misunderstand how a thing works?
- 10. Suppose you were an expert model maker, and you just obtained a job with a museum of natural history. What sorts of models do you think you would be asked to make?

 ML

EXERCISE: "Relationships" and related words

(p. 40, lines 20-21)

Underline the word (or words) that you think best completes each sentence.

- 1. My uncle, my cousin and my grandfather are my (connections) (relations) (relatives) (in-laws) (relationships).
- 2. After I was told the story, I (related) (connected) (spoke) (handed) (relayed) (spread) it to my friends.
- 3. When the baseball broke the window, it was an example of a cause-effect (connection) (relationship) (relative) (relay).
- 4. The wheels on a skateboard are an example of a part-whole (relay) (problem) (connection) (system).
- 5. What Johnny said wasn't related in any way to what we were discussing, so we considered that his remarks were not (relative) (relevant) (reverent) (respectfu!).
- 6. If a building is tall in comparison with other buildings, one can say it is tall (relative) (relevant) (connected) (with respect) to the others.
- 7. A friendship is a (connection) (bridge) (network) (relationship).
- 8. The way a citizen belongs to his country is an example of a political (system) (relationship) (set-up) (problem).
- 9. Edgar said, "I have good (connections) (relationships) (feelings) (patterns) with all my relatives."
- 10. The equal sign (=) stands for the (relative) (connection) (mark) (relationship) of equality.

MI.

EXERCISE: What are relationships?

(p. 40, lines 20-21)

What is the chief difference between the following:

- 1. the relationship between a rider and horse and the relationship between a driver and a car?
- 2. the relationship between a doctor and a patient and the relationship between a buyer and a seller?
- 3. the relationship between friends and a love-hate relationship?
- 4. the relationship between fire and water and the relationship between fire and paper?
- 5. the relationship between writers and stories and the relationship between painters and paintings?
- 6. the relationship between Rapunzel and her hair and the relationship between Jack and the beanstalk?
- 7. the relationship between the heart and the blood and the relationship between the lungs and the air?
- 8. the relationship between clouds and rain and the relationship between falling snow and snowdrifts?
- 9. the relationship between United States and Canada and the relationship between Illinois and Missouri?
- 10. the relationship between the sun and sunlight and the relationship between an electric bulb and electric light?

ML

ACTIVITY: Map reading

(p. 41, lines 7-18)

Pull down a map of the United States. Have a group of students line up side by side, facing the map. Let each student represent a certain city, as follows: San Francisco, Salt Lake City, Denver, Omaha, Chicago, Cleveland, New York. Now call out questions:

- 1. "San Francisco, are you west of New York and to the right of Cleveland?"
- 2. Omaha, are you east of Chicago and to the left of Denver?"
- 3. "Salt Lake City, are you east of Cleveland and to the right of Denver?"
- 4. "New York, are you west of Salt Lake City and to the right of Chicago?"
- 5. "Cleveland, are you east of Denver and to the left of Omaha?"
- 6. "Denver, are you west of Chicago and to the left of New York?"
- 7. "Chicago, are you east of Salt Lake City and to the right of Omaha?"

Obviously the name of each city is ambiguous, for in one case it refers to a city on the map, and in the other case it refers to a person who stands for that city.

Moreover, you are working with two co-ordinate systems, one an east-west axis, and the other a left-right axis.

When you are finished, try doing the same thing with a north-south axis and an updown axis.

EXERCISE: Analogies in grammar

(p. 42, line 12)

I. The following analogies deal with singulars and plurals. If the analogy is an exact one, supply the missing word. If the analogy isn't exact, mark it with an X.

a. foot is to feet as boot is to ______.

b. *crow* is to *crows* as *brow* is to

c. laugh is to laughs as calf is to ______.

d. march is to marches as arch is to______.

e. box is to boxes as ox is to . .

f. deer is to deer as goose is to ______.

g. house is to houses as mouse is to ______.

5. However to homove to home to to

h. *whisper* is to *whispers* as *sigh* is to ______.

i. life is to lives as knife is to ______.

j. hoof is to hooves as roof is to ______.

II. The following analogies deal with present and past tenses. If the analogy is an exact one, supply the missing word. If the analogy isn't exact, mark it with an X.

a. take is to took as shake is to ______.

b. pace is to paced as face is to . .

c. rang is to rung as hang is to ______.

c. rung is to rung as rung is to

d. *meet* is to *met* as *beat* is to______.

e. cheat is to cheated as treat is to ______.

i. win is to won as sin is to _____.

g. grind is to ground as find is to ______.

h. sing is to sung as wing is to ______.

cry is to cried as hide is to______.

break is to broke as make is to ______.

ML

EXERCISE: Constructing analogies by sentence completion (p. 42, line 12)

I. This is an exercise in completing a sentence that has three blanks. For the first blank, choose a word from the first column; for the second blank, a word from the second column; and for the third blank, a word from the third column. The sentence is:

When I ______, I feel like a ______

, i icci iikc	. u	
Column 1.	Column 2.	Column 3.
am angry	dizzy	paper clip
hate	homesick	chimney
like someone	purple	firecracker
know I am liked	loud	watermelon
am thinking	green	engine
am late to school	graceful	lobster
hope	constipated	summer day
have a friend	red	pickle
am working	dizzy	river
am sleeping	bright	song
am miserable	bright	skateboard
am being stubborn	wooden	balloon
trying to be careful	slippery	meatgrinder
watch TV	powerful	fire engine
eat spaghetti	gritty	handshake
whisper	floating	circus acrobat
am proud	salty	drum major
dream	frightened	dragonfly
make a wish	weary	toad
	majestic	ocean liner
	happy	poem
	wet	bellybutton
	slimy	flounder
	soft	

II. Now, still keeping the sentence with the blanks and using the words in column 1, fill in the remaining blanks with words of your own—not those in columns 2 or 3.

DISCUSSION PLAN: What do we find out in school? (p. 42, lines 25-26)

Pixie says, "If you never went to school, how would you find out what it was you were doing all along?"

- 1. Does Pixie claim that, in school, you find out what you already *know* or what you already do?
- 2. What is the difference between knowing and doing?
- 3. In what ways are *knowing* and *doing* similar?
- 4. Are there things you do that you don't know?
- 5. Is speaking English one of the things you do? Do you go to school in order to find out what you do what you speak English?
- 6. Is talking one of the things you do? Do you go to school in order to discover how you can discuss things better?
- 7. Is reading one of the things you do? Do you go to school in order to understand how you read, so that you can read better?
- 8. Have you ever had the feeling that the things you learned in school were things you already knew?
- 9. Have you ever had the feeling that much of what you learn in school you forget?
- 10. Do you believe Pixie when she says that, in school, we find out what it was we were doing all along?

ML

Episode 3

(pp. 43-46)

Comparisons as one variety of relationships

After some conversation at the lunch table, Pixie tells Isabel about the talk she and Brian had with Mr. Mulligan about relationships. Isabel claims that all comparisons are relationships: "Whenever you compare things, you're pointing out relationships." Presumably she means that when people point out resemblances or similarities, note differences such as greater or less, and observe cases of equality or identity, they are making comparisons, and these comparisons in turn *identify* relationships. This does not mean that the only relationships are those pointed out by comparisons. For example, when people speak of family relationships, or causal relationships, or means-end relationships, they aren't making comparisons.

Comparisons within order

Comparing plays a great role in language and scientific inquiry. An individual's knowledge of the world always takes place in the context of some order or frame of reference or category. For example, color is experienced in terms of the more general order known as the spectrum of visible light. Tones are experienced in terms of an order of differences which correspond to differences in vibrations per second. Temporal differences are arranged according to units of time in a unidirectional series. All of a person's perceptions are contextual or categorical, and people tend to make comparisons of one perception with another within the same order. This is why Isabel and Pixie are able to talk about one person running faster than another or one room being larger than another. Each of the comparisons is made within the same order.

Comparisons that cut across orders: The logic of figurative language

Brian puzzles everyone by making a comparison that cuts across two orders when he says, "This morning was as long as the Amazon." Some people would call Brian's remark a "category mistake," because it confuses time and space. In fact, as Mr. Mulligan will explain on the next page, Brian has uttered *a simile*. Pixie and Isabel remark that the two things are long but in different ways. (This incident reminds us of the question Pixie asked in Chapter One, "Do I belong to my body *in the same way* as my body belongs

to me?") Isabel, Brian, and Pixie have reached an understanding of how figures of speech are usually constructed. Figurative comparisons are made not within the same order but, instead, from one order to another. In effect, they have uncovered the logic of figurative language.

Ratios

The children proceed to discuss ratios. If one compares the number of boys in the class to the number of girls, one obtains *a ratio*. If there are 8 boys and 12 girls in a class, this means the ratio of boys to girls is 8:12. Ratios themselves can be the subjects of further comparisons. One could say 2:3 as 8:12 and have an exact comparison.

Figures of speech as cross-categorial

Exact comparisons differ from ordinary figures of speech. For example, if someone says that "anger is red," or "jealousy is green," he surely does not mean by such metaphors that exact comparisons are involved. It is as though he has said that red stands in the scale of colors about where anger stands in the scale of feelings. This is highly inexact, but it may be suggestive.

Similes

Similes and metaphors are reviewed briefly by Mr. Mulligan for the benefit of Isabel and Pixie. He explains that a simile is a comparison between two things which, in Pixie's words, "are alike only in some eentsy way." Similes state that one thing is *like* another. The respect in which the comparison is being made, even though it is inexact, may be either explicit or implicit.

Metaphors

In the case of a metaphor, we specifically assert that two things (things which are derived from different orders or categories) are the same. Thus, to say that a person is a pig is to speak metaphorically. Another way of putting this might be to say that metaphors are literally false but figuratively true or that they are for the most part false but in one special sense true.

People are not literally pigs, but sometimes it is more appropriate, when observing a certain kind of behavior, to describe it as "piggish" than to describe it as "human."

Studying figurative language and learning to appreciate literature

It may seem to be laboring a point to introduce third and fourth grade children to the inner workings of similes, metaphors, and analogies. It could be argued that such considerations are premature for children of eight or nine, but unless younger children are equipped with some such understanding, the richness of the literature they will later encounter will pass them by. In just a few more years, in high school perhaps, they may encounter, for example, the rich eloquence of Harry Hotspur:

For thought's the slave of life, And life's time's fool, And time must have a stop. — Henry IV, Part I

Without some insight into the mechanism of these nested metaphors, they will fail to see the intricacy of the figurative language, its stateliness, its cumulative power, and how, finally, the brakes are forcefully applied and everything grinds to a halt. In what ways, they will fail to ask, is thought the slave of life? How is life time's fool? Why must time have a stop? They will not think to ask these questions, and they will fail to grasp the variety of meanings that are at work beneath the surface of the lines themselves. Such children grow up to be adults whose thought is the slave of life, whose lives are the fools of time, and whose times come shortly to a stop.

EXERCISE: Identifying the relationships in analogies

(p. 44, line 24)

What relationships are being compared in the following cases?

Example: "April 1 is to April 30 as September 1 is to September 30."

(The relationship in question is that of the first day of the month to the last day of the month.)

- 1. Key is to lock as combination is to safe.
- 2. Page is to book as shelves are to closet.
- 3. Shoes are to feet as gloves are to hands.
- 4. Chewing is to swallowing as swallowing is to digesting.
- 5. Cutting a slice of bread is to having toast as breaking an egg is to having an omelette.
- 6. Squeezing oranges is to having orange juice as squeezing the tube is to having tooth paste.
- 7. Two is to six as three is to nine.
- 8. A square is to a cube as a circle is to a sphere.
- 9. Thinking is to doing as plans are to action.
- 10. Remembering is to imagining as the past is to the future.

ML

EXERCISE: Analogies involving parts and wholes

(p. 44, line 24)

Here we compare part-whole relationships to one another. For example: Leaf is to tree as finger is to *hand*.

- Page is to book as week is to ______.
 Letter is to word as minute is to ______.
- 3. Music is to song as soundtrack is to ______.
- 4. Feather is to bird as scale is to . .
- 5. Gill is to fish as lung is to ______.
- 6. Crest is to hill as peak is to ______.
- 7. Spring is to year as childhood is to ______.
- 8. Porch is to house as nose is to ______.
- 9. Player is to team as worker is to ______.
- 10. Student is to class as teacher is to ______.

ML

EXERCISE: Using the word "like"

(p. 45, lines 6-7)

- 1. Joe: "This blanket smells like a wet dog." Mac: "It smells of a wet dog."
- 2. Gina: "As it is now March, it will soon be spring."
 Rick: "Gina, I wish you would always be as you are right now."
 Who is using the word "as" in the sense of "like", and who is using it in the sense of "since"?
- 3. Edgar: "Sometimes Mac behaves *like a* bull in a china shop."

 Do you understand what Edgar means, even though you have probably never seen a bull in a china shop? How is that possible?
- 4. Mr. Jones (standing beside his stalled car): "It looks like it's out of gas." Does Mr. Jones mean:
 - a. "This car looks like cars look when they have run out of gas."
 - b. "It is *likely* that this car has run out of gas."
- 5. Sally: "I swear, those twins are *like* as two peas in a pod."

Does Sally mean, when she uses the word "like":

- a. since
- b. likely
- c. alike
- d. same
- 6. Minnie: "Sometimes I say the same word twice in the same sentence."

 Does Minnie really mean that she uses the *same* word twice? Or does she mean that sometimes, in the same sentence, she uses a word that's *like* another word?

EXERCISE: Constructing similes

(p. 45, lines 18-20)

Different people see things differently, and so it is not surprising that they should come up with different associations. In this exercise, complete your own similes, and try to construct others as if they were made up by characters in *Pixie*.

1. "A young tree in a storm is like...

Your simile:

Pixie's simile:

2. "A Christmas without presents would be like...

Your simile:

Isabel's simile:

3. "Having a dog with fleas in the house is like...

Your simile:

Miranda's simlie:

4. "Eating pickles and chocolate ice cream together is like...

Your simile:

Neil's simile:

5. "The first star in the evening sky is like...

Your simile:

Brian's simile:

ML

EXERCISE: Constructing similes

(p. 45, lines 18-20)

There are various ways of constructing similes:

1. Given a relationship, we can look for appropriate terms:

Example: Given: "is the sister of", we might look for one or both terms that are not normally family terms. For instance, we might say, "The moon is the sister of the sun."

2. Given two terms, we can look for a relationship of similarity:

Example: Given: "a life" and "a moment," we might try something like "A life is as brief as a moment."

3. Given a term and a relationship, we can look for another term:

Example: Given: "wolf cub" and "as innocent as", we could perhaps say, "The wolf cub looked as innocent as a newborn lamb."

Let's try all three methods of constructing similes:

I.	Given the relationship:	:	
1.	The(geometrical figure)	is the cousin of the	(geometrical figure)
 3. 	(a kind of soda water)	is as flat as is as vast as	(a state)
4.	(a subject studied in school)	are as happy as	(part of the universe)
5.	(types of children)		(types of birds)
II.	(types of workers) Given two terms:		(types of insects)
1.			as a pair of jeans.
2.			as a warm blanket.
3.	o .		as a family quarrel.
4.	His handshake was as _		as a dead mackerel.
5.			_ as a pearl falling on velvet.
III.	Given a term and a rela	tionship:	
1.	The horse was as power	ful as	
			(not an animal)
2.		was as shy as a	a flower in the cleft of the rock
	(not a flower)		
3.	The children on the play	ground were as n	oisy as
			(not children)
4.			are as rare as hen's teeth
5.	His laugh was as grating	g as	

EXERCISE: Constructing metaphors by crossing categories (p. 45, line 26)

- I. Match the feelings in the column on the left with the creatures in the column on the right. For example: "Pride is a peacock." If you can't find terms that match, say so.
 - 1. Envy
 - 2. Hate
 - 3. Love
 - 4. Jealousy
 - 5. Anger
 - 6. Compassion
 - 7. Resentment
 - 8. Tenderness
 - 9. Calm
 - 10. Sadness
 - 11. Grief
 - 12. Hope
 - 13. Despair
 - 14. Satisfaction
 - 15. Uneasiness

- a. camel
- b. elephant
- c. shark
- d. octopus
- e. jellyfish
- f. roach
- g. black widow spider
- h. turtle
- i. mountain goat
- i. lizard
- k. bumblebee
- 1. eagle
- m. hippopotamus
- n. deer
- o. rattlesnake
- **II.** Same as above, but match the fictional characters in the left-hand column with the foods in the right-hand column.
 - 1. Goldilocks
 - 2. Cinderella
 - 3. Rumpelstiltskin
 - 4. The Wicked Witch of the West
 - 5. Tom Thumb
 - 6. Jack the Giant Killer
 - 7. The Little Tailor
 - 8. The Match Girl
 - 9. The Hardy Tin Soldier
 - 10. Rapunzel
 - 11. Mary Poppins
 - 12. R2D2
 - 13. Dorothy
 - 14. Alice
 - 15. Popeye

- a. spaghetti
- b. mushrooms
- c. spinach
- d. chocolate cake
- e. popcorn
- f. hamburgers
- g. frankfurters
- h. porridge
- i. vanilla ice cream
- i. brown sugar
- k. corn
- l. beans
- m. peanuts
- n. soup
- o. milk

- **III.** Now, try matching the feelings in Part I with the fictional characters in Part II.
- **IV.** Now, try matching the creatures in Part I with the fictional characters in Part II.
- **V.** On the basis of the above exercises, is it evident that many comparisons don't make good metaphors at all? Can you say wht it is that *does* make a good metaphor?

ML

EXERCISE: Changing similes to metaphors

(p. 45, line 26)

A simile can be changed into a metaphor by dropping the word "like" (or the respect in which the comparison is made), and by saying that one thing *is* the other:

Simile: She was like a summer day.

Metaphor: She was a summer day.

Simile: He was as hungry as a wolf.

Metaphor: He was a wolf.

Convert the following similes into metaphors:

- 1. Bill was as slippery as a fox.
- 2. Henry was as dangerous as a runaway auto.
- 3. The mountain peak sparkled like a gem.
- 4. Her teeth were like pearls.
- 5. The snow-covered trees were like crystal chandeliers.
- 6. The escaped prisoner was as free as a bird.
- 7. Emma is as brave as a lion.
- 8. His face resembled a piece of raw beef.
- 9. Her scream was like a knife.
- 10. His mind was like the Dead Sea.

EXERCISE: Metaphors and analogies

(p. 45, line 26)

Can metaphors be expanded into analogies? Consider this:

The eye is the lamp of the body.

One might reconstruct this as follows:

The eye is to the body as a lamp is to a house.

OR,

The eye is to the body as a lamp is to a traveller.

Obviously there is considerable room for discretion and improvisation. But it would seem that metaphors, like similes, are implicit analogies. Try converting the following metaphors into analogies:

- 1. The moon was a silver ship in the sky.
- 2. The earth was a garden.
- 3. Poetry is a blue guitar.
- 4. Her child was the light of her life.
- 5. The engine purred.

Conversely, try changing the following analogies into metaphors:

- 1. The river flows across the plain the way a cat slinks across the floor.
- 2. Ponies are to horses as paperbacks are to books.
- 3. Reading is to writing as listening is to speaking.
- 4. Plums are to prunes as grapes are to raisins.
- 5. Her head was covered by a hat as a circus is covered by a tent.

(Note that you can sometimes derive two metaphors from a single analogy. For example, in 5, one might say:

Her head was a covered circus.

OR,

Her hat was a circus tent.

ML

EXERCISE: Similes, metaphors and analogies

(p. 46, line 2)

Consider the following:

Simile: *The heart is like a pump.* Metaphor: *The heart is a pump.*

Analogy: The heart works the way a pump works.

OR,

The heart pumps blood the way a pump pumps water.

OR.

The heart circulates blood the way a pump circulates water.

OR,

any number of other comparisons of what hearts do and what pumps do. (Notice how much more specific analogies are.)

Could you give the missing forms in the following cases:

Simile	Metaphor	Analogy
1. A sundial is like a clock.	1. A sundial is a clock.	1.
2. The mind of a newborn child is like a blank piece of paper.	2.	2.
3. A country is like a ship at sea.	3.	 A country without a government is like a ship without a rudder.
4. 5. The human mind is like a river.	4. Earth is a spaceship.5.	4. 5.

EXERCISE: When are we unreasonable?

(p. 46, lines 11-16)

In the following cases, say whether you think the persons involved are behaving reasonably or unreasonably.

If your answer is *reasonably*, suggest circumstances under which such behavior would be considered unreasonable.

If your answer is *unreasonably*, suggest circumstances under which such behavior would be considered reasonable.

- 1. Mary is looking for her friend Debra's listing in the phone book, although she knows Debra has no telephone.
- 2. Andrew shared an important secret with Debra, and Debra told the whole class about it. Now Debra can't understand why Andrew isn't grateful to her.
- 3. Jerry goes to and from school on his hands and knees, because he doesn't want to miss any \$100 bills that are lying on the ground.
- 4. Marc says he won't go to school until the meaning of the word "education" is explained to him.
- 5. Marc wants Andrew to play marbles with him, and Andrew wonders what will happen if he refuses.
- 6. Jerry has made a map of a!! the alternative ways in which he can go to and from school.
- 7. Debra can't find Mary's name in the phone book. She thinks maybe it will be in the back of the book, in the section called "Unlisted Numbers."
- 8. Debra hit Marc because she knows Marc doesn't like her.
- 9. Marc felt like slapping Mary, so he did.
- 10. Mrs. Jones said to the class, "This is a story you can all tell your children," even though she knew no one in the class had children.

ML

EXERCISE: Yarn analogies

(p. 46, line 2)

Materials: yarns of different colors.

- 1. Cut the yarn into a number of pieces, each of different lengths, from one inch long to sixteen inches long.
- 2. Arrange sixteen piles of yarn, each pile of a different set of lengths.
- 3. Each player must choose four pieces of yarn, so as to form an arithmetical analogy, such as 1" is to 2" as 3" is to 6".
- 4. The first two numbers of the analogy should be the same color yarn. The last two numbers should be of a different color.
- 5. Afterwards, play "Show and Tell": each player should hold up his set of yarns, show them to the class, and tell what the numerical analogy is.

ML

EXERCISE: Fact-finding

(p. 46, line 22)

Divide the class into groups of six. (If you have an odd number in the class, some groups can be larger.)

The players sit in a circle, each with a pencil and paper. Begin by having each person put one fact at the top of the paper.

Then swap papers.

On the new paper you receive, write another fact under the fact which your classmate wrote.

Swap papers again.

Continue this until you have five facts on each sheet of paper.

Each student should have an opportunity to read one fact on the paper that she or he ends up with. The person who wrote the fact must explain to the class why it is a fact. Some students might disagree. Discussion should continue until several ways of ascertaining a fact have emerged.

When the class has reached this point, have six persons each offer a way to tell what makes a fact a fact.

AMS

Episode 4 (pp. 46 and 47)

Pixie's manipulative conduct

In this episode, Pixie describes in a matter of fact way how she had a tantrum when she wasn't permitted to stay up late and how she proceeded to punish everybody by refusing to eat. The incident is reminiscent of Pixie's staring at Miranda to goad Miranda into kicking Pixie and thereby provoke the girls' mother into punishing Miranda. Obviously, Pixie has considerable insight into those manipulative tactics identified as "punishing," "causing to suffer," "getting someone into trouble," "making others feel guilty."

Must we listen to relevant truths?

Miranda tries her hand at the same game by telling Pixie how lucky she is to have anything to eat. Pixie's comment is that what Miranda says may very well be true, but that is no reason why Pixie has to hear it. It is evident that Pixie feels she can dismiss the question of relevance as irrelevant when she chooses.

Pixie's confusion

Having shown herself as mischievous, illogical, and obstinate, Pixie agrees to talk to her father about what she learned in school that day. She tells him that they discussed models, metaphors, similes, and analogies. She proceeds to define each of these terms and gets them thoroughly confused. Her parents are aware of her confusion but manage to say nothing. Miranda, on the other hand, contests everything Pixie has just said.

Pixie as a detached observer of herself

Yet Pixie's insight enables her to recognize her own error. Even while arguing with Miranda, she felt no pleasure in the contest, because she knew that Miranda was right and she was wrong. Pixie is even able to observe the irony of having Miranda vanquish Pixie by making use of Pixie's own ideas. It is a measure of Pixie's ability to detach herself from her own situation and observe herself candidly and objectively even when she is behaving outrageously. The last paragraph exemplifies this. Miranda calls

Pixie a little goose, and Pixie, while feeling the insult, can't help classifying it as a metaphor.

Mr. Mulligan's role

A word should be said about Mr. Mulligan's role in *Pixie*. He is the only adult who is given anything more than a superficial treatment in the book, although there are some occasional hints that Pixie's parents—and particularly her father—are complex individuals. Mr. Mulligan's kindliness is never in question when he talks to the children in his class. But what of the *reliability* of his knowledge when the children ask him questions? One may speculate that Mr. Mulligan is at times caught off guard by these questions, and in his surprise, he tends to give superficial answers. Perhaps he does not readily accept the role of an authority figure, and like Pixie he sees matters from his own point of view and offers opinions which are not definitive or all-encompassing.

Connections and relationships

Take Mr. Mulligan's remark that relationships are "connections." It is true, in some sense, that the two terms are synonymous. Moreover, "connections" is a strong word: People have "political connections"; they "make connections" at airports; telephones have good and bad "connections." When standing for a *link*, a tie, a liaison, a rapport, the word "connection" is not easily faulted. Its use as a verb "to connect," a more down-to-earth way of saying "to relate," should be remembered. E. M. Forster's famous dictum is not "Only relate," but "Only connect."

But there are relationships which are less easily recognized as connections: part-whole relationships, aesthetic contrasts, statistical correlations, logical disjunctions and oppositions. These and many others would be treated reductively if seen merely as connections.

Perhaps connections can best be seen as one variety of relationships, but this would still mean that Mr. Mulligan's initial interpretation of relationships is a reductive one.

Consider Mr. Mulligan's first reaction to the request for a definition of analogy. He sees it as a resemblance between two things having dissimilar parts but similar relationships (p. 41), and he agrees with Pixie when she formulates the matter in this fashion. However, the other children do not follow the "two things" approach. The illustrations they proceed to offer are of *four* things in proportionate relationships, that is, in the A is to B as C is to D pattern.

Analogies and structural similarities

Is Mr. Mulligan wrong? Not really. The children seem familiar with A is to B as C is to D, but Mr. Mulligan apparently has another type of analogy in mind. The paradigm the children tend to work with expresses a resemblance between two relationships: "Pennies are to nickels as nickels are to quarters," or "Fathers are to sons as mothers are to daughters." The paradigm Mr. Mulligan thinks of expresses a resemblance between the way one thing is done and the way another thing is done: "The workmanship in this motorcycle is like the workmanship in a watch," or "Kissing your aunt is like eating an egg without salt." In this sense, an analogy is an expanded simile or metaphor—one that has been examined and articulated so as to reveal the most pronounced correspondences and resemblances. Thus to expand on "The fog is like a cat," or "The earth is a spaceship" would be to develop analogies by elucidating the *structural similarities* between the things being compared.

Analogical reasoning

Finally, consider the way Mr. Mulligan drew out the implications of Pixie's remark on p. 35, in the previous chapter. The children had been talking about space and time, and Pixie suggested that there are resemblances between the way things exist in space and time and the way thoughts exist in the mind. Mr. Mulligan appreciates Pixie's insight. He realizes that she has suggested a farreaching analogy. The mind can be considered a dimension in the sense that, just as space and time need have no existence of their own, independent of their "contents," the same may be true of the mind. It need not be a thing like an empty box or a blank sheet of paper. It could be a dimension which develops along with the emergence of "mental events."

Obviously, Mr. Mulligan and Pixie are entitled to their opinions, and one need not take these as of more authority than those of other persons in the classroom. Our interest is not so much in their metaphysics as in the process by which they reason metaphysically, not so much in their views on whether relationships do or do not exist as in the process by which they explore the issues involved.

Some clue with respect to encouraging children to reason philosophically in the classroom can undoubtedly be discovered by carefully noting Mr. Mulligan's role in the class conversations.

EXERCISE: What (if anything) is wrong with these analogies?

(p. 47, lines 8-12)

- 1. *baking* is to a *cake* as *reading* is to a *book*.
- 2. *skiing* is to snow as *swimming* is to *water*.
- 3. *telling time* is to *time* as *telling the truth* is to *truth*.
- 4. breaking a cup is to pieces of the cup as breaking a rule is to a rule.
- 5. *hearing* is to *sound* as *touching* is to *light*.
- 6. baking a cake is to the baked cake as writing a book is to the written book.
- 7. *skiing* is to *snow* as *flying* is to *kite*.
- 8. *telling time* is to *time* as *asking a question* is to *the question* asked.
- 9. breaking a cup is to pieces of the cup as breaking an appointment is to the broken appointment.
- 10. hoping is to the future as despairing is to the past.

ML

EXERCISE: Genus-species analogies

1. vegetable is to cabbage as______ is to apple.

2. roach is to insect as rose is to ______.

3. lemonade is to drink as hot dogs are to ______.

4. lion is to animal as tuna is to ______.

5. Chicago is to city as______ is to country.

ML

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REVIEW EXERCISE: Evaluating analogies

(p. 47, line 9)

In this exercise, you are to give grades to the analogies, based upon the following scale: A = very good

B = good

C = okay, neither bad nor good

D = poor

E = unacceptable

Be prepared to give a reason for the grade you assign.

- 1. Thoughts are to thinkers as shoes are to shoemakers.
- 2. Giggling is to laughing as whimpering is to crying.
- 3. Pins are to pinning as needles are to needling.
- 4. Pins are to pinheads as needles are to needle eyes.
- 5. Bread is to puddles as butter is to rain.
- 6. Words are to stories as seeds are to flowerbeds.
- 7. Ideas are to children as memories are to adults.
- 8. Trying to get someone else to think is like walking a dog.
- 9. Taking home a report card is like removing a Bandaid from an open wound.
- 10. Trying to listen to two different conversations at the same time is like trying to boil water in the refrigerator.
- 11. Trying to !earn something from TV is like trying to learn something from skywriting.
- 12. Putting sauerkraut over your pizza is like putting chow mein in your milkshake.
- 13. Trying to teach someone by means of a test is like trying to put air in a bicycle tire by means of a pressure gauge.
- 14. Chalk is to blackboard as pencil is to paper.
- 15. Older people are different from younger people in the same way that Americans are different from foreigners.

EXERCISE: Finding the limits of analogies

(p. 47, line 9)

- 1. Consider the analogy: Puppies are to dogs as people are to their parents. How is the relationship between puppies and dogs *different from* the relationship between people and their parents?
- 2. Consider the analogy: Minutes are to time as inches are to space. How is the relationship between minutes and time *different from* the relationship between inches and space?
- 3. Consider the analogy: Blood is to an animal as sap is to a tree. How is the relationship between blood and animals *different from* the relationship between sap and the tree?
- 4. Consider the analogy: Knees are to legs as elbows are to arms. How is the relationship between knees and legs *different from* the relationship between fingers and hands?
- 5. Consider the analogy: Toes are to feet as fingers are to hands. How is the relationship between toes and feet *different from* the relationship between fingers and hands?

EXERCISE: Reasoning analogically

(p. 47, line 9)

Would you say that the following cases are good thinking or poor thinking? If you can't decide, check "?"

		Good Thinking	Poor Thinking	?
1.	Virginia: "Eating with chopsticks is like walking on stilts."			
2.	Mary Lou: "I'm nine years old, but when I stand on my head, I'm only six. That's because, when you turn a 9 upside-down, it becomes a six."			
3.	Irving: "Whenever I hear a loud noise, I find that there's bsome kind of machinery making it. So thunder must be caused by a big machine in the sky."			
4.	Ken: "Clouds look like smoke. So a cloudy sky must look like a smoky sky."			
5.	Carla: "Bees make honey, so butter must come from butterflies."			
6.	Spud: "If you eat a lot of fish, you'll become a better swimmer."			
7.	Meg: "If you eat a lot of fish, you'll become a better thinker, because fish is a brain food."			
8.	Gus: "Ideas flow through your mind like boats travel on a river."			
9.	Richard: "When people speak, the sounds come from their throats. So the sounds a radio makes must come from its throat."			
10.	Chris: "That building is so pretty, it's like frozen music."			

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EXERCISE: What, if anything, is wrong

(p. 47, line 9)

- 1. Dogs are to pups as chickens are to eggs.
- 2. Going to the movies by yourself is like eating potatoes without gravy.
- 3. Letters are to packages as telegrams are to airmail.
- 4. Canoes are to motorboats as a soapbox is to a sportscar.
- 5. George Washington is to Mount Vernon as Abraham Lincoln is to a log cabin.
- 6. Needles are to thread as scissors are to paper.
- 7. Playing soccer with a pumpkin is like running a race with your shoelaces tied together.
- 8. Reading by candlelight is like eating peas with a knife.
- 9. Brooms are to mops as hairbrushes are to powderpuffs.
- 10. Oil is to grease as dust is to dirt.

In the case of any of the above which you think are not right as they stand, how would you rewrite them to make them better?

ML

EXERCISE: Analogies that make sense and analogies that don't

(p. 47, line 9)

Can you say which of the following make sense to you, and which don't? And, in each case, can you say why? In each case, where would you put the analogy on the scale below?

- 1. Boys who don't have older brothers are like bicycles without radios.
- 2. Girls without sisters are like thread without needles.
- 3. Rabbits without noses are like fish without gills.
- 4. A loaf of bread without a crust is like an onion without a skin.
- 5. Taking a bath in a bathing suit is like getting dressed while wearing mittens.
- 6. Taking a shower in a raincoat is like going to sleep wearing galoshes.
- 7. Going barefoot in summer is like singing in the rain.
- 8. Talking to yourself is like thinking out loud.
- 9. Kids without money are like lakes without fish.
- 10. Drinking warm milk in the dark is like eating fish in the snow.

Makes a lot of sense				Makes a little sense, but not much			Makes no sense at all		
10	9	8	7	6	5	4	3	2	1
									ML

EXERCISE: Doing the opposite

(p. 47, lines 8-12)

This is an exercise in doing just the *opposite* of what you are told to do. (It is therefore a little like Simon Says.)

One player stands in the center of the room, and others form a circle around him. Player in center is connected, by means of a red ribbon and a blue ribbon, to each of the players in the circle. (He holds one end of each ribbon, they hold the other ends.) Player in center may give any of the following commands: *Reds, hold on! Reds, let go! Blues, hold on! Blues, let go!*

At the command, the players must do the opposite of what they have been told. Thus, at the command, "Reds, hold on!" they should let go their Blues. At the command, "Blues, let go!" they should hold on to their Reds, without letting go of their Blues, either.

ML

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EXERCISE: Arguments

(p. 47, line 20)

In everyday language, an *argument* is a kind of quarrel or dispute, as a result of a disagreement over an issue.

There is a different, philosophical sense of the word argument: it is a kind of reasoning in which *a conclusion* is defended or justified by citing one or several reasons. (We can usually distinguish reasons by the fact that they are introduced by such words as "since," "inasmuch as," "because," and "as." We can distinguish conclusions by the fact that they are introduced by such words as "it follows that," "therefore," "so," "it is clear that," "it must be admitted that," or sometimes no word at all.)

In the following cases, draw a single line under the reason or reasons, and draw a double line under the conclusion. (The arguments may not be *good* arguments.)

Examples: Since Wyoming is a state, <u>it is not a country.</u> He is a human being; <u>therefore</u>, he is a person.

- 1. Dogs are animals, so Rover is an animal.
- 2. I'll go to the movie this afternoon, since I've heard it's lots of fun.
- 3. Melissa enjoyed the movie; therefore it must be a good film.
- 4. Because you're not old enough, you can't be admitted to the movie.
- 5. Inasmuch as Gary is two years old, it follows that he wasn't born yesterday.

Teacher Self-Evaluation Chapter Six

- 1. Have I given my students sufficient practice in seriation?
- 2. Do each of my students understand what is meant by a *model?* How do I know?
- 3. Do students seem to understand need for a short reading from text before discussion or engaging in an exercise?
- 4. When a student gives an answer, am I more comfortable in asking a follow-up question of the same student?
- 5. Am I more comfortable in asking other students what they think of a student's remark?
- 6. Am I reluctant to point out contradiction during the discussion?
- 7. Am I reluctant to pursue a topic during a discussion? Why?
- 8. Are my students manifesting different intellectual behaviorism in class?
- 9. Do my students respect each other's ideas and take them more seriously in class?
- 10. Do class discussions build more now, and involve more students than a month ago?
- 11. Are my students thinking better than a month ago? How do I know?

CLASSROOM DIALOGUE

Date	· -
Topic	

WHAT THE STUDENTS ACCOMPLISHED DOING THIS CHAPTER

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EXERCISES IN THIS CHAPTER THAT WORKED

Specific Skills Taught **REASON THEY WORKED** Specific Skills Reenforced Specific Skills to Work on in the future

265

CHANGES I WOULD MAKE NEXT TIME I DO THIS CHAPTER		OTHER SOURCES THAT RELATE TO THEMES IN THIS CHAPTI		
	CORRELATED EXERCISES I WOULD USE	CHILDREN'S LITERATURE		
		Stories		
		Play		
		MOVIES		
		ART WORKS AND PROJECTS		
		MUSICAL COMPOSITIONS AND PROJECTS		
		DANCE EXERCISES		
		OTHER		

OVERLAPPING THEMES FROM THIS CHAPTER WHICH OCCUR IN OTHER DISCIPLINES I TEACH

REVIEW EXERCISES Part I

EXERCISE: Putting first things first

(p. 2, lines 3-7)

Pixie here gets entangled in a very confusing sequence of events, and her efforts to bring some order into the matter represent an attempt at *seriation*. She seems to be asserting the following:

First, a person has an experience;

Second, a person makes up a story that is about or that expresses that

experience;

Third, a person tells how the story was made up out of the experience.

So, as she says, first it had to happen, and then came the story. That's the first sequence. Secondly, "there's the story, and then there's the story of how it happened." That's the second sequence. So Pixie is correct about what comes first, what comes second, and what comes third. But as she relates the matter (lines 3-7), she unfortunately puts the second sequence first, and the first sequence second. (When you're nine years old, things like these aren't too easily sorted out!)

Consider the following sequences. Are they okay, or do they need to be reversed?

			Okay	Needs to be reversed	?
1.	Tammy: Bud:	"As Jeff runs, he seems to be getting smaller." "That's 'cause he's running towards us."			
2.		"Why did the car run out of gas?" "Because it stopped."			
3.	Sally: Glen:	"Were you born and raised in Brooklyn?" "Yes, and in that order."			
4.	Marty: Herb:	"Why do you eat so much?" "Because I feel so full."			
5.	Sylvie: Gail:	"Why did Tessie's dog die?" "Because it finally came to the end of its life."			
6.	Sam: Pogo:	"Tell me a story you've made up." "I make up stories as I tell them, and I tell them as I make them up."			

EXERCISE: Analogical reasoning

Even though a given analogy may be sound, some things will follow plausibly from it, while others will not.

For example, we may say that the familial relationship between Pixie and her parents is exactly the same as the relationship between Miranda and *her* parents. From this it does follow that Pixie and Miranda are sisters; it does *not* follow that they are the same height.

In the following case, check either "follows", "doesn't follow," or "can't tell."

Given the analogy: the time relationship between yesterday and today is exactly the same as the time relationship between today and tomorrow. (Another way of putting this would be to say: Yesterday was followed by today in the same way as today will be followed by tomorrow.) What would you say about these statements:

		Follows	Doesn't Follow	Can't Tell
1.	Today comes after yesterday.			
2.	Tomorrow comes after today.			
3.	Tomorrow comes after yesterday.			
4.	Yesterday was Friday.			
5.	Today is 24 hours long.			
6.	Yesterday is the day before tomorrow.			
7.	Some babies will be born tomorrow.			
8.	Monday comes before Tuesday.			
9.	Tomorrow morning comes before yesterday evening.			
10.	Every day has a yesterday.			
11.	Every day has a tomorrow.			
12.	Every day has a day-before-yesterday.			
13.	Tomorrow will be a better day.			
14.	Every day is like every other day.			
15.	It can't be today in New York and tomorrow in Paris at the same time.			

ML

EXERCISE: What's wrong with this reasoning?

- 1. Ella: "Freddie goes to the Wilshire School. They say that's the worst school in town. So Freddie must be one of the worst kids in town!"
- 2. Don: "This morning, when we had that fire drill, I began to worry. And sure enough: this afternoon, we had a real fire."
- 3. Dora: "I love the way Jerry whistles. I'!! bet he sings well, too."
- 4. Pete: "So what if I'm only six years old? If my brother can go out on dates, why can't I?"
- 5. Gus: "Instead of doing my homework, I'll go to sleep, and maybe, when I wake up, I'll find that someone has done it for me."
- 6. Tina: "I think Boston is a beautiful city. I wish the whole class could visit it."
 - Ralph: "If you like it so much, Tina, why don't you just go live there?"
- 7. Stacy: "Wilma says she thinks this is a pretty good school."
 Minerva: "Wilma? What does she know? First of al!, she's the smallest of kid in the class. And second of all, everyone knows that she

has an uncle who got a speeding ticket last week."

- 8. Tess: "Betsy, you've been moping around here a!! day. That's not like you."
 - Betsy: "I know. I don't resemble myself at all today."
- 9. Teacher: "Spud, take these sheets of paper and give one to every person who doesn't have one."

Spud: "So do I give one to myself or not?"

10. Jerry: "The fire department in our town is on the job 24 hours a day." Minerva: "Those poor firemen! Don't they ever sleep?"

ML

EXERCISE: Common mistakes in reading

Sometimes we misread things that are written properly. Sometimes we read all right, but *what's written* is incorrect.

- **I.** For example, a word may be written with one letter wrong. In the following sentences, see if you can find a word with an incorrect letter.
- 1. Some of the best wives in California have been produced by people trampling on grapes with their feet.
- 2. The Scarecrow was puzzled about the relationship between his body and his wind.
- 3. Many people think al! birds are alike and can't tell the difference between a duck and a moose.
- 4. We were puzzled and unhappy, because the highway was full of confusing sighs.
- 5. We didn't argue with the policeman, because he had the paw on his side.
- II. Sometimes a letter is omitted. Can you find any such cases here:
- 1. "I love Elinor," said Dorothy. "She's my fiend."
- 2. "I love my family," said Myrtle. "Al! except my bothers."
- 3. "For our vacation, we went to Siberia," said Sam. "It was quite a trap."
- 4. Santa Claus is always shown as having a red and jelly face.
- III. Sometimes a letter is added unnecessarily. Can you find any such cases:
- 1. When he got to the bank, Mr. Jones parked his car and crashed his check.
- 2. We took our dog to the vet, because he was full of tricks and fleas.
- 3. "Aha!" exclaimed the villain, "what a pretty wrench you are, Belinda!"
- 4. He picked up the parts of the jigsaw puzzle and tried to pierce them together.
- 5. "I've got to move along," said Gwen. "I've got better things to do than hang around and brandy words with you guys all day long."
- 6. Mrs. Johnson kept some change in a box marked "Pretty Cash."
- 7. Gloria ignored Jim, but for him it was love at first slight.

EXERCISE: Finding spelling mistakes

Some of the following sentences contain words with a single letter that is incorrect. Can you find the words and correct them?

- 1. When the speaker entered the hall, a mush fell over the audience.
- After the ceremony, everyone threw mice at the bride.
- The house was not built of concrete blocks, but of tricks and mortar.
- The first day he was at school, he got into a fight with the belly of the class.
- The shoplifter in the bakery shop took a break while no one was looking.
- When his parents are away, he has to find the baby.
- After many brushes with the law, he was arrested.
- We finally found seats in the front row, right in front of the screen.
- "I don't like to brag," he said, "but when it comes to math, I'm the bust in the class."
- 10. After he said all those nasty things, his mother washed his mouth out with a little slap.

ML

EXERCISE: Metaphorical language (I)

One way of creating metaphorical language is to attribute human feelings or thoughts to non-human parts of nature (animals, trees, rocks, etc.) or to nature as a whole. In this exercise, examples are given in the column on the left, and you are asked to supply comparable examples in the column on the right.

A. Feelings

1. The wind loves to play with my hair. 1. The wind hates . 2. Nature loves to hide. 3. The moon is angry with the sun, because 3. The sun is sulking because it shines so brightly. 4. My trees are grumpy because I don't 4. My house is delighted because water then enough. 5. The brook sings merrily on its way to the 5. The unhappy pebble sea.

B. Thoughts and Mental Acts

- to my town.
- 2. The trees in the park agree to have a party.
- 3. Every day, the caterpillar wondered if it was a cross between a worm and a silverfish.
- 4. The kitchen sink continued to insist that it was innocent.
- 5. The balloon whispered, "When I think I might some day explode, it blows my mind!"

- 1. The clouds decided to rain when they got 1. The stars refused
 - 2. The sidewalk in front of my house is considering .
 - 3. The windows in my house are debating
 - 4. The volley ball had the impression that ____
 - 5. As the hot dog said to the mustard,

ML.

EXERCISE: Reading for reasoning

One morning, Pixie came to the table for breakfast. Her mother gave her a bow! of oatmeal. Pixie picked up her spoon and played with her oatmeal, but didn't eat it.

After a while, Miranda sat down at the table, and she too was given a bowl of oatmeal.

Pixie tasted her oatmeal, and made a face. "It's cold!" she said. "Miranda," isn't your oatmeal cold, too?"

Miranda said, "No, it's warm."

"Lukewarm?" Pixie asked.

"Okay, maybe lukewarm," Miranda answered.

"Oh," said Pixie, "that's what *I* call *cold!*"

"Pixie," said Miranda, "you were given your oatmeal long before I was. It's no wonder yours is colder than mine. Mine may not be hot, but it's warmer than yours."

"Everybody gets hot oatmeal except me," said Pixie.

I. Reading comprehension

Read the following statements about the story, and then classify them

		Must be correct	Probably correct	Must be incorrect	Probably incorrect	Can't tell
1.	Miranda sat down at the table before Pixie did.					
2.	Miranda began to eat before Pixie did.					
3.	Miranda played with her food before Pixie did.					
4.	Miranda put sugar on her oatmeal.					
5.	Pixie doesn't like oatmeal.					
6.	Pixie's oatmeal cooled faster than Miranda's did.					
7.	No one got hot oatmeal except Miranda.					
8.	Oatmeal stays warm in the pot on the stove longer than in the bowl.					
9.	Miranda prefers lukewarm oatmeal to hot oatmeal.					
10.	Some people like cold oatmeal.					

TT	D .	•
	Reversing	comparisons
	TIC V CI SIII S	comparisons

- 1. If Pixie's oatmeal is *colder than* Miranda's, then Miranda's oatmeal is than Pixie's.
- 2. If Miranda is taller than Pixie, then Pixie must be _____ than Miranda.
- 3. If Miranda is *two grades* ahead of Pixie, then Pixie must be _______Miranda.
- 4. If Miranda is *standing to the left of Pixie*, then Pixie is ______ Miranda.
- 5. If Pixie wears *smaller* shoes than Miranda, then Miranda must wear _____ shoes than Pixie.

III. Differences of kind and degree

- 1. Is it possible that half the oatmeal in a bowl could be cold and the other half hot?
- 2. Is it possible for *all* the oatmeal in a bowl to be cold *and* hot at the same time?
- 3. When Miranda received her oatmeal, was it warmer than Pixie's oatmeal at that moment?
- 4. When Miranda received her oatmeal, was it warmer than Pixie's oatmeal was when Pixie received it?
- 5. Could Miranda's oatmeal have been cold?
- 6. If something is said to be "lukewarm," does that mean it's warm or cool?
- 7. If something is said to be "lukewarm," does that mean it's half warm and half cold?
- 8. Could Miranda have been given *more* oatmeal than Pixie?
- 9. Do we ever say that the weather is "lukewarm,"? If not, why not?
- 10. If we only had the words "cold" and "hot," could we get along without the words "warm" and "cool"?

IV. Impromptu definition

- 1. Pixie claims everyone gets hot oatmeal except her. Is that true? Is it all right for her to say something that's not true?
- 2. Pixie claims that what other people call "lukewarm," she calls "cold." Is it all right for her to do that?

EXERCISE: A fable for reading

A traveller came to a beautiful field of grass. It was green and inviting. It stretched on and on for miles.

"Isn't it strange," said the man to himself. "There are no paths anywhere! No one ever seems to go this way!"

Then he noticed that each blade of grass was razor-sharp.

He turned away, saying only, "I'm sure there must be other directions in which to go."

(adapted from Stephen Crane)

The statements that follow deal with the story you just read. How would you classify them?

		Right	Probably Right	Wrong	Probably Wrong	Can't Tell
1.	The man was very tired, and wanted to rest.					
2.	The grass had just been mowed.					
3.	The man didn't see the paths, but they were there.					
4.	Someone had sharpened each blade of grass.					
5.	The man didn't mind getting his feet cut.					
6.	From what the man did, we can tell why there were no paths.					

ML

EXERCISE: A fable for reading

The wind and the sun were having an argument. Each claimed to be the stronger. Then they saw a man walking down a long street. "If you're so strong," said the sun to the wind, "make that man take off his coat."

The wind blew and blew, but the man, who was trying hard to stay on his feet, only drew his coat more and more tightly around him. Finally the wind gave up. "Your turn" it said to the sun.

The sun turned its warm rays on the man. "How hot a day it has suddenly become," he said to himself, and he removed his coat.

(adapted from Aesop)

The statements that follow deal with the story you just read. How would you classify them?

		Right	Probably Right	Wrong	Probably Wrong	Can't Tell
1.	Before the argument, the wind and the sun had been friends.					
2.	The man resisted the wind.					
3.	The man liked the wind better than he liked the sun.					
4.	The wind and the sun agreed to take turns.					
5.	The sun was more gentle than the wind.					
6.	The wind won the argument.					

EXERCISE: A parable for reading

A family had become angry with a cat which lived with them. The cat was always trying to catch birds, but didn't care to catch mice.

One day, a bat flew into the house. The cat watched the bat fly about for a while. Then the cat said to himself, "I can't win! If I don't go after it, they'll ca!! it a flying mouse. And if I chase it and catch it, they'll be sure to call it a bird!"

(adapted from Lord Kames)

The statements that follow deal with the story you just read. How would you classify them?

		Wrong	Probably Wrong	Right	Probably Right	Can't Tell
1.	The cat had become very fat from eating birds.					
2.	The cat preferred eating birds to eating mice.					
3.	The people loved the cat, even though they were angry with it.					
4.	The cat thought it could catch the bat if it wanted to.					
5.	The cat is trying to make a decision, and so he asks himself what will happen if he does this, or if he does that.					
6.	The family thought birds were goodand mice were bad.					
7.	The cat felt that the family didn't trust it.					

ML

EXERCISE: Analogies involving things and their properties

Every thing has a number of features or properties. For example, the sky is blue, the grass is green, the American flag is red, white and blue. (This doesn't mean that *all* skies are blue: they can sometimes be red, or grey, etc. Grass can be blue, or brown, etc. But skies are typically blue and grass is typically green.)

In this exercise, you are to show that the relationship between one thing and its outstanding property is similar to the relationship between another thing and its outstanding property. For example: *fire is to hot as ice is to cold.*

1.	snow is to white	as	fire is to
2.	rain is to wet	as	dust is to
3.	sugar is to sweet		salt is to
4.	ball is to round	as	pancake is to
5.	lead is to heavy	as	hydrogen is to
6.	yell is to loud	as	whisper is to
7.	year is to long	as	second is to
8.	river is to flowing	as	pond is to
9.	submarine is to diving	as	raft is to $_$.
10.	dime is to silver	as	penny is to
			ML

EXERCISE: Analogies involving opposites

The relationships being compared are, in this case, relationships of opposition or contrast. For example: *sound is to silence as wet is to dry*.

1.	help is to hurt	as	support is to
2.	give is to receive	as	agree is to
3.	keep is to give away		find is to
4.	float is to sink		stay is to
5.	bold is to shy		loud is to
6.	happy is to sad	as	warm is to
7.	clean is to dirty		fair is to
8.	succeed is to fail		win is to
9.	wild is to tame	as	strong is to
10.	always is to never		something is to
	•		

EXERCISE: Analogies involving causes and their effects

We observe that some things cause or produce other things. When one thing happens, it generally causes something else to happen. The following analogies suggest that there is, in each case, a resemblance between two such causings or producings.

For	example:	cloudburst is to flo snow is to snowdri		ack of rain is to drought rain is to puddles	
1.	using a pair	ntbrush is to painti	ng as	using a violin is to	·
2.	dropping ar	n egg is to a broken	egg as	throwing a brick at a w	indow is to
3.	hammering	is to driving in a r	nail as	sawing is to	·
4.	running is t	o feeling tired as re	esting	is to feeling	·
5.	chasing is to	o capturing as sear	ching	is to	·
6.	mixing red	and yellow is to or	ange a	as mixing blue and yell	ow is to
7.	gasoline is t	to automobile engi	nes as		_ is to animals.
8.	farming is t	o crop as carpentry	y is to		·
9.	dreaming is	s to dreams as			_is to thoughts.
10.	liking is to f	friend as			is to enemy.
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EXI	ERCISE: An	alogies involving	corre	ctive actions	
	ter. We can o poli	compare these cor	rective as	ave gone wrong, or to e actions in various wa doctor is to disease medicine is to illness	

EXERCISE: Analogies in grammar

	analogy is a good one, supply the missing word. If the analogy isn good, mark it with an X.
a.	have is to had as save is to
b.	show is to showed as grow is to
c.	live is to have lived as give is to
d.	treat is to treated as beat is to
e.	hurt is to have hurt as fear is to
f.	drink is to drank as think is to
g.	work is to worked as perk is to
h.	seem is to seemed as dream is to
i.	suffer is to have suffered as cover is to
j.	think is to have thought as sink is to
II.	The following analogies deal with affirmatives and negatives. if the analogy is a good one, supply the missing word. If the analogy is a good, mark it with an X.
a.	You are is to you are not as I am is to
b.	He was is to he <i>wasn't</i> as you <i>were</i> is to
c.	I spell is to I don't spell as I like is to
d.	I should is to I shouldn't as you would is to
e.	I can is to I can't as he will is to
f.	They <i>will</i> is to they <i>won't</i> as you <i>hope</i> is to
g.	She <i>may</i> is to she <i>may not</i> as we say is to
h.	He <i>hopes</i> is to he <i>doesn't hope</i> as she <i>knows</i> is to
i.	We buy is to we don't buy as they could is to
	M

I. The following analogies deal with present and past tenses. If the

air conditioner is to heat as furnace is to _______.
 sleep is to fatigue as aspirin is to _______.
 dentist is to toothache as _______ is to stomach ache.
 sanitation workers are to trash as street cleaners are to _______.
 food distribution is to famine as _______ distribution is to unemployment.

EXERCISE: Ambiguity

Which of the following sentences can be read in two different ways, and which can be read only one way? In case your answer is "two ways", what are those two ways?

		Two ways	One way
1.	After adjusting his camera, the thief took the picture.		
2.	A half hour later, the judge stopped arguing in the courtroom.		
3.	The army made its final stand along the banks of the Hudson River.		
4.	After we made our stand, we sold lemonade along the banks of the Hudson River.		
5.	When it got to be midnight in the tavern, the police stopped drinking.		
6.	The director didn't like the way the dog behaved in that scene, so he shot it again.		
7.	The teacher told the members of the class to go home without hesitation.		
8.	Since I had worn old gloves, I wasn't afraid of getting them dirty.		
9.	We enjoyed going to Suzy's, to listen to her baby talk.		
10.	I had forgotten just how great music can sound		
11.	At the movies, I saw an Indian dance.		
12.	Since we had nothing to do, we went home.		
13.	Roy and Jack took turns driving.		
14.	The soldiers stopped the tank and removed the gasoline from its tank.		
15.	"Oh," she exclaimed, "I just love growing flowers!"		

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EXERCISE: Ambiguity

Which of the following involve ambiguity?

- 1. Willa Mae: "Neil, would vou like to play bridge?" Neil: "No, but how would you like to play house?"
- 2. Tommy: "What was in the mail today, Pop?" Father: "I got a notice about serving on the jury." Tommy: "Well, I'm sure you'll want to obey the letter of the law."
- 3. Isabel: "Will Mr. Mulligan take off for spelling errors?" Robert: "No, he's going to take off for the summer."
- 4. Geraldo: "I just love parties." Kate: "That's good, because I read in the paper that the school will be visited today by the mayor and a party of his friends."
- 5. Rusty: "Boy, it sure is hot today!" Jennie: "You can say that again!"
- 6. Chita: "Weren't you impressed with our high school's 1981 graduates?" Willa Mae: "Yes, and I was also impressed with our 80 dropouts."
- 7. Tommy: "I wouldn't light that firecracker if I were you." Neil: "Look who's talkin'!"
- 8. Driver who has been arrested: "Offisher, I am not under the affluence of inkohol!" Policeman: "That's easy for you to say!"
- 9. Advertisement: "There's no time like the present for a present like Time."
- 10. Accused, in courtroom: "Has the judge pronounced my sentence yet?" Guard: "What's the matter-can't you speak for yourself?"
- 11. Criminal: "Judge, don't give me capital punishment. Life is a gift!" Judge: "It sure is, so that's what I'll give you: life!"
- 12. Headline: JOGGER HIT BY CAR IN GOOD CONDITION.

EXERCISE: Reasoning problems for discussion

- 1. There are tigers. Does it follow that there are sabre-toothed tigers?
- 2. There are people. Does it follow that there are strong people?
- 3. There are cats. Does it follow that there are no blue-eyed cats?
- 4. There are birds. Does it follow that al! birds fly?
- 5. There are no horses with horns. Does it follow there are no unicorns?
- 6. There are triangles. Does it follow that they are all three-sided?
- 7. There are captains. Does it follow that they are captains of ships?
- 8. Many people are wealthy. Does it follow that there are few people who are poor?
- 9. There are raindrops. Does it follow that they are wet?
- 10. There is chewing gum. Does it follow that there is gum?

CHAPTER SEVEN

Episode I

(pp. 49-50)

Rules of freedom

The parents of Pixie and Miranda have to go out for the afternoon. Pixie's mother tells them not to let anyone in. "That's a rule you musn't break!" she adds.

Pixie is ecstatic and claims that she and Miranda are "free." She seems to feel that family rules no longer apply and "everything is possible." Just then Isabel and Connie knock at the door. Pixie and Miranda argue over whether the rule applies to people they know.

At the end of the episode, Pixie is sitting on the floor of her mother's closet, grumbling to herself, "This is the only place I can be free to be me."

The treatment of rules in the episode goes through a number of phases. In the first phase, the mother tells them solemnly that her rule is not to be broken. In the next portion of the episode, Pixie evidently thinks that when her parents are away, the rules are completely suspended. When Isabel and Connie knock on the door, Miranda speaks for her mother and insists that the rule is inflexible. Pixie does not continue to claim that the rule is suspended. What she argues now is that her mother did not mean the rule to apply to their friends.

What are rules?

You can begin the discussion of this episode by asking your students what they think a rule is. Some of them may see rules as commands or imperatives. Others may see them as guidelines. Still other children may see rules as prohibitions. As the discussion proceeds, a consensus may develop as to how rules function. For example, the students may come to see some rules as necessary for people's protection. (Traffic rules are one example.) Your students might agree that groups of people with different goals and needs have to work out mutually convenient schedules and plans, which they all willingly follow. These plans are also rules. Your students might also conclude that every aspect of social life is a kind of game, and if the game is to proceed, the players must abide by certain regulations. Still other children might see rules as a means of preserving the social order because they believe that, without rules, people would behave in a wild and barbaric fashion. They might go so far as to claim that living in accordance with rules is what distinguishes civilized human beings from animals.

Your class discussion may generate many other interpretations of rules. If your students do not readily come forward with opinions or theories about rules, it might be well to quiz them less on what they think rules are and more on the rules they are familiar with in their lives. In this way you could get a list of examples on the board before proceeding with the analysis.

Freedom as absence of rules

Just as Pixie doubted the existence of relationships, because she couldn't perceive them, so she is inclined to doubt the existence of rules when her parents who create the rules are no longer present. Obviously, Pixie is inclined to think that whatever is not tangible is nonexistent. But Pixie goes beyond merely doubting that there are rules. She sees rules as constraints upon her freedom and she greets the removal of the rules ecstatically. We're free, she yells. The house belongs to us and everything is possible.

Evidently, for Pixie, the adults who make the rules specify what is permissable and what is forbidden. Remove the restriction and total freedom becomes a fact: Everything becomes possible. Pixie's parents do not seem oppressive at all, so it is strange for her to start talking this way when they leave. Pixie's parents are apparently very mild and congenial, but they are adults and they know things Pixie doesn't know. She may suspect them of having mysteries because she has mysteries herself. If there is ever an opportunity to find out what these mysteries are, it is when the parents are not there.

Freedom to be oneself

Because Pixie shares a room with her sister, she may feel that she has little privacy. She may be thinking that she really wants the freedom to be herself—not the freedom to be wild. Pixie has seen some of her mother's adult clothes. They appear most interesting to her and she wonders what they would look like on her. So, in a sense, to be herself she wants to look like her adult mother.

Isabel's discretion

You might also want to ask your students what they think of Isabel's behavior. As soon as she hears Miranda and Pixie arguing over the family rule, she decides to leave. For a young person, she is very discreet. Perhaps this is another sign of her friendship for Pixie: She doesn't want to get Pixie into trouble.

EXERCISE: "With" (p. 49, line 3)

The word "with" can be used in many different ways, and each different use involves a different meaning.

In the following exercise, say whether you think the uses are the same or different, and explain why, if you can:

	Same	Different	?
1. "If you're not with me," said Herman, "you're against me." "Aw, Herman," Daisy replied, "I'm just not with it today."			
2. "I like spaghetti with sauce," said Irene."I like people with honesty," said Trudy.			
3. "This painting," said Howard, "is called 'Woman with Child'." Selma replied, "A woman is said to be 'with child' if she's expecting a baby."			
4. The policeman wanted to know what company myfather was with. My father replied with great care.			
5. George had a fight with Clara. George got in touch with his uncle.			
6. "Off with their heads!" cried the Red Queen. "That's okay with me," replied Alice.			
7. "Go to bed!" said his mother. "Away with you!" With each passing day, he loved her more.			
8. Susie grinned <i>with</i> delight. The new king was drunk <i>with</i> power.			
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DISCUSSION	PLAN:	Rules
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(p. 49, line 8)

- 1. What is a rule?
- 2. Do all families have the same rules?
- 3. Are a!! rules in families made up by the parents?
- 4. Do children ever invent rules?
- 5. Have you ever played a game in which you made up the rules?
- 6. Are there rules which it is all right to break?
- 7. Are there rules telling you to do things which you're *unable* to do? If there are, should you be punished for not obeying such rules?
- 8. Do rules in a family remain the same, whether the parents are present or not?
- 9. What happens to rules that no one obeys?
- 10. Does every rule have a good reason?

ML

EXERCISE: Rules

(p. 49, line 8)

Do you agree or disagree with the following statements? If so, why? If not, why not?

		Agree	Disagree	<u>?</u>
1.	All families have the same rules.			
2.	Rules are made only by parents.			
3.	Children sometimes invent rules.			
4.	Only parents can enforce rules.			
5.	It is never right to break a rule.			
6.	If a person is unwilling to obey a rule, the rule applies to him just the same.			
7.	If a person is unable to obey a rule, the rule doesn't apply to him.			
8.	Family rules remain the same, whether or not adults are present.			
9.	Some rules are imposed on us by others.			
10.	Some rules we invent and impose on others.			
11.	Some rules we invent and impose upon ourselves.			
12.	Some rules are invented by others, but we accept them and impose them upon ourselves.			
				ML

(p. 49, line 13)

DISCUSSION PLAN: Are there exceptions to rules?

(p. 49, line 8)

- 1. John woke up in the morning with a bad cold. Does he have to go to school?
- 2. Tommy's bed time is at 9:00, but *Star* Wars is on T.V. from 7:30 to 9:30. Can he stay up until 9:30?
- 3. Susan is on a diet. Should she have ice cream and cake on her birthday?
- 4. Mr. Jones is driving on an empty highway. Should he go 20 miles per hour faster than the speed limit?
- 5. The ice cream man is outside and Mary's father has left a bit of change on his dresser.
- 6. Mary's mother has left a big plate of cookies on the table. They are for her women's group, and Mary's mother has told Mary not to take any.
- 7. Joan gets a bad headache. Should Sue give her medicine?
- 8. Aunt Sally has a new baby boy, and she wants to paint his bedroom pink.
- 9. If you got an A on a test by cheating, and nobody finds out, does the A count?
- 10. Can you make up some new rules while playing hop-scotch?
- 11. Can you invent a new way to play tag?
- 12. Do you have to stay within the lines in a coloring book?
- 13. Does a finger painting have to look like anything?
- 14. Can you spell your name in a different way?
- 15. Can you play baseball with 12 on a team?

AMS & MW

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DISCUSSION PLAN: Freedom

- 1. What do you think Pixie means when she yells, "We're free!"?
- 2. Are we free when there is no one over us to tell us how to live?
- 3. Are we free when we have to make up our own rules instead of having them already made up for us?
- 4. Are Pixie and Miranda free when their parents go away?
- 5. Are we free when nothing stops us from doing what we want to do?
- 6. Are we free if no one prevents us from hurting ourselves?
- 7. Would we be free if there were no laws to prevent other people from hurting us?
- 8. Would we be free if the laws applied only to some people and not to everyone?
- 9. If you were the only person in the world, could you live without rules?
- $10. \,$ Can a large number of people live together in the world without rules?

ML

EXERCISE: Freedom

(p. 49, line 13)

Do you agree or disagree with the following statements? If you agree, why? If you don't agree, why not?

		Agree	Disagree	?
1.	We are free if no one tells us how to live.			
2.	We are free if we make up and follow our own rules for how to live.			
3.	We are free when nothing gets in our way.			
4.	We are free if we think we're free.			
5.	We are free when we can do what we think best.			
6.	We are free if we are healthy.			
7.	We are free if we are intelligent.			
8.	We are free only when everyone is free.			
9.	We are free if we are ourselves.			
10.	We are free when all the above statements are combined. $ \\$			

DISCUSSION PLAN: Rules

(p. 49, line 15)

- 1. Why isn't there a rule against flying around the living room?
- 2. Can there be a rule against sneezing when you have a cold?
- 3. Do we need a rule to make us breathe?
- 4. Why isn't there a rule against eating breakfast?
- 5. When do we need a rule to have a good time at a birthday party?
- 6. Should there be rules about cleaning your room?
- 7. Do you need rules on spending your allowance?

AMS

DISCUSSION PLAN: Free

(p. 49, line 18)

- 1. Are you free to kiss your elbow?
- 2. Why do children sometimes ride buses for free?
- 3. Is the air free?
- 4. Are highways free?
- 5. Are you free to play professional football?
- 6. Are you free to become president of the U.S.A.?
- 7. Are you free not to do your homework?
- 8. Are you free to stop eating?
- 9. Are you free to rob a bank?

MW

DISCUSSION PLAN: Is everything possible?

(p. 49, line 19)

- 1. Is it possible that the sun could become the moon?
- 2. Is it possible that a triangle could become a rectangle?
- 3. Is it possible that a girl could become President of the U.S.?
- 4. Is it possible that someone born in another country could become President of the United States?
- 5. Is it possible that all the stars could burn out?
- 6. Is it possible that the earth could become flat?
- 7. Is it possible that night could become day?
- 8. Is it possible that 2 and 2 could be 3?
- 9. Is it possible that a man could make himself invisible?
- 10. Is it possible that the sun could disappear?

AMS

EXERCISE: Writing about Pixie in her mother's clothes (p. 50, lines 1-2)

Suppose the following took place:

Pixie puts on her mother's slinky black evening gown and stands in front of the mirror, purring loudly.

Miranda says, "You just like to dress up in those clothes so as to be as different as possible from the way you really are." Pixie replies, "This is the way I really am."

In two or three sentences, tell whether you agree with Miranda or with Pixie, and why.

Episode 2

(pp. 50-52)

Mystery creatures

The children in the class, according to Pixie, were trying to guess each other's mystery creatures. Isabel and Pixie happened to see Brian with a card of a giraffe, so Pixie concluded that Brian's mystery creature must be a giraffe. Earlier she teased Tommy about the unicorn. Now she knows Brian's mystery creature. At this time, she has an advantage over at least two people in the class. The one thing she doesn't want to happen is that anybody should discover the identity of her mystery creature.

It might be well to note that Isabel can be counted on to be discreet. Just as she did not want to get Pixie into trouble with Miranda and her parents, so on this occasion, she tells Pixie that Brian's mystery creature is none of her business.

At this point, Pixie is almost trapped in precisely the same way that she had previously trapped Tommy. She had suggested to Tommy that his creature be a unicorn. Neil begins to tell the class that Pixie's creature is a mammoth. Neil thinks it will be a joke at Pixie's expense because mammoths are extinct, but Pixie momentarily believes that he really does know the identity of her mystery creature and receives a good scare.

Afterwards, Pixie admits to Isabel that it was a joke to find out Brian's secret, but it wasn't a joke when she thought Neil had found out hers. She makes no mention of the trick she had played on Tommy.

It is obvious that Pixie is beginning to learn some aspects of reciprocity. She's beginning to find out that the pranks she plays on other people are not so pleasant when they are played on her.

EXERCISE: Tautologies

(p. 50, line 9)

Miranda says "Rules are rules." This is an example of a *tautology*. A tautology is normally an empty statement, because it says that something is itself.

Occasionally, however, tautologies are meaningful. When Miranda says, "Rules are rules," she means, presumably, that rules are not to be broken. Or if someone says, "Business is business," he presumably means that kindness and generosity are out of place in the business world.

The following expressions are tautologies or near-tautologies. Can you say what you think they mean? (If you think they don't mean anything, say so. If you think they're not tautologies at all, say so.)

- "Boys will be boys."
- 2. "Nothing succeeds like success."
- 3. "Everything is something."
- 4. "History is mere history."
- 5. "Al! people are human beings."

(p. 50, line 3)

EXERCISE: Metaphors as borrowed terms

(p. 50, line 3)

Very often, a metaphor involves the *borrowing* of a word from a familiar usage, and applying it in a similar but less customary usage. (The dress will not *literally* swallow Pixie, but Miranda borrows the word "swallow" to describe what will happen.)

For example, we may use the expression "the heart of the problem" or we may refer to "the eye of the storm." In cases like these, we borrow the words "heart" and "eye" from the familiar context of the human body, and apply them to other situations.

Sometimes, however, the word or phrase is *not borrowed*, because it is as literally appropriate in the one setting as in the other. For example, "the back of the house," or "the side of the barn." Houses and barns have backs and sides just as people do, and the words in question may not be borrowed at all.

In the following cases, which represent the use of borrowed terms, and which are terms that don't seem to have been borrowed?

		Borrowed	Not Borrowed	?
1.	The mountaineers climbed the <i>face</i> of the cliff.			
2.	The jeweler removed the face of the watch.			
3.	The pilot sat in the <i>nose</i> of the airplane.			
4.	The heart <i>pumps</i> blood to the body.			
5.	He drank from the <i>mouth</i> of the bottle.			
6.	The city hall now has two new wings.			
7.	He placed his tongue against the <i>roof</i> of his mouth.			
8.	He kicked the ground with the heel of his boot.			
9.	The storm is very angry.			
10.	The sea is <i>calm</i> .			
11.	He was a smooth talker.			
12.	It was a pleasant day.			
13.	The clothes in the washing machine were agitated.			
14.	He walked with a springy step.			
15.	The flag flew <i>proudly</i> against the sky.			

FXI	ERCISE: Secret places	(p. 50. lin	nes 18-21)		
	mount a pinasc	the teem of the storm	ML		
	mouth a phrase	the teeth of the storm			
	chin oneself	the bellying of the sail the ear of the crown			
	toe the mark face the music	muscle one's way in			
	knuckle under	shoulder one's responsi	bilities		
111.	8	•	1. 11101		
III	What do the following ex	nressions mean?			
5.	If someone throws a ball at you	ır head,			
4.	If you need to borrow money, d	lon't go to a			
	of the game.		goat		
3.	Lulu carried the football in the	wrong directions and was the	lamb		
2.	without complaint.	uch a to take his medicine	wolf		
1.		has, Nancy likes to down her food.	duck shark		
II.	Choose a word from the oblanks on the left.	column on the right that would best f	it into the		
J.	The mayor relused to	the parade.			
5.	The mayor refused to		head		
4.	The city agreed to		arm		
3.	Detective: "Maybe I'll		nose		
2.	Shopper: "I think I'll just		hand		
1.	Jody: "Please me	the towel."	eye		
ı.	blanks on the left.	column on the right that would best i	n mio me		
I. Choose a word from the column on the right that would best fit is					

EXERCISE: Metaphorical expressions

Pixie's secret place, where she goes when she wants to be alone with her thoughts, is her mother's closet. In a single sentence, tell about the special place you have, or would like to have, where you can go to be alone.

When everyone has written a sentence, collect them and assemble them into a group poem.

EXERCISE: Refrigerator writing

(p. 50, lines 18-21)

Take a blank piece of paper and put it in a jar. Put the top on the jar—tightly. Put the jar in the refrigerator—all the way in back. Leave it there for a week.

Now remove the jar, and take out the piece of paper. On the piece of paper, write a sentence, in the first person, in which the piece of paper tells how it felt to spend a week in the refrigerator.

ML

DISCUSSION PLAN: Teasing

(p. 51, line 22)

Part I: Is it any of your business to:

- 1. tell the teacher John is cheating?
- 2. tell your sister to brush her teeth?
- 3. tell your parents to begin cooking dinner?
- 4. tell your teacher you've learned division already?
- 5. tell your older sister you don't like her boyfriend?
- 6. tell a girl to stop teasing her dog?
- 7. tell a woman to stop scolding her child?
- 8. tell a man not to smoke in the movies?
- 9. tell the doctor you don't like the medicine?
- 10. tell your mother you won't take the medicine?

Part II: Should these people be teased?

- 1. Johnny is the best player on the team; and he strikes out.
- 2. Sam, as usual, gets the lowest mark on the spelling test.
- 3. Johnny buys his bald father a comb with no teeth.
- 4. Sally's teenage brother is growing his first moustache.
- 5. Tommy is the only kid in fourth grade to become an uncle.
- 6. Mary wants a record player for her birthday and you find out that she is getting a typewriter.
- 7. Sam is juggling raw eggs and he drops one on his shoe.
- 8. Alan is convinced that he will win the lottery.
- 9. Judy is convinced that she will get the lead in the school play.
- 10. John's April Fool's joke backfires and he gets soaked with water.

MW

DISCUSSION PLAN: Do you think any of the following presently exist? (p. 51, lines 25-26)

- 1. Prehistoric animals.
- 2. Children who never saw a TV set
- 3. Children stronger than grownups.
- 4. Dogs bigger than horses.
- 5. Children smarter than their teachers.
- 6. Children older than their parents.
- 7. Children old enough to drive cars.
- 8. Sounds that can't be heard.
- 9. People who advise the President what to do.

MW

EXERCISE: "Extinct"

(p. 51, line 26)

Some things (like dinosaurs) are completely extinct. But other things (like volcanoes) have instances which are extinct and others which are not. How would you classify the following:

		Never existed	All instances extinct	still in existence	Some instances extinct some not extinct	?
1.	Storks					
2.	Dragons					
3.	Romans					
4.	Unicorns					
5.	Buffalo					
6.	Peacocks					
7.	Saber-toothed tigers					
8.	Model "T" Fords					
9.	Leprechauns					
10.	Meteors					

DISCUSSION PLAN: Anticipating the. consequences of what we do (p. 52, lines 4-5)

- 1. If a person who has been drowning is *not* given artificial respiration, what is likely to happen?
- 2. If people dump poisons into their rivers and lakes, what's likely to happen?
- 3. If a road map doesn't resemble the state it's supposed to be a map of, what's likely to happen?
- 4. If someone puts paste on someone else's seat, what's likely to happen?
- 5. If someone removes the legs from a table, one by one, what's likely to happen?
- 6. If tomorrow is a regular school day, but you tell your friend there's no school tomorrow, what's likely to happen?
- 7. If you and your friends discuss your ideas, what's likely to happen?
- 8. If you and your family discuss your ideas, what's likely to happen?
- 9. If you and your friends don't discuss your ideas, what's likely to happen?
- 10. If you and your family don't discuss your ideas, what's likely to happen?

ML

DISCUSSION PLAN: Should the way we treat others resemble the way we would like them to treat us? (Page 52, lines 4-5)

Pixie plays a trick on Tommy by suggesting that his mystery creature be a unicorn. But she gets very upset when Neil seems to be giving away the identity of *her* mystery creature. Perhaps she has learned a lesson from this (but will she get the lesson straight?)

Suppose the lesson is that we should treat others as we would like them to treat us. Are there any circumstances under which this rule would *not* apply? Could the rule be formulated differently? Perhaps you will be in a better position to answer these questions if you first discuss the following:

- 1. Do other people treat you the way you treat them?
- 2. Do you treat others the way they treat you?
- 3. Do you act the way you *ought* to act?
- 4. Would you *like* to act the way you *ought* to act?
- 5. Would you *like* to act the way you would *like* others to act?
- 6. Should you act the way others should act?
- 7. *Should* you act the way you would *like* others to act?
- 8. Should you not act the way you would not want others to act?
- 9. Should you not act the way others do not act?
- 10. Should you not act the way others should not act?
- 11. Which of the following formulations do you prefer: (rank them if you can.)
 - a. Treat others as they treat you.
 - b. Do not treat others as they treat you.
 - c. Do not treat others in ways they do not treat you.
 - d. Treat others as you would like them to treat you.
 - e. Do not do to others what you would not like them to do to you.
 - f. Treat others as they ought to treat you.
 - g. Don't do to others what you would like to do to them.

Episode 3

(pp. 52-55)

Different kinds of rules

Prior to the zoo trip, Mr. Mulligan and the class have a discussion of rules. Mr. Mulligan agrees with Kate that school rules and zoo rules are different. He also points out that many rules apply to grown-ups as well as children, and he gives the rules of grammar as an example.

Jenny suggests that there is no such thing as a game without rules. This is probably so, but one should not conclude that rules are a defining characteristic of games, because games are not the only things that have rules.

The children in the class then give examples of rules in each of the academic areas that they study in school. Pixie objects to Rusty's example. She claims that rules tell us how to act. She says that Rusty's example doesn't tell them what to do; it merely tells how numbers act. Mr. Mulligan thereupon explains that Pixie is right and that what Rusty proposed was not a rule but a principle of arithmetic.

Rules and principles

Chita takes the distinction between rules and principles into consideration and raises a question as to which of the two is to be found in spelling. Rather surprisingly, Mr. Mulligan evades the question, possibly because the distinction between rules and principles breaks down. For example, spelling is both a descriptive and a prescriptive discipline. Principles are descriptive: They are laws which describe natural or human behavior. There are principles of magnetism and combustion in nature, and presumably there are principles also of the social, psychological, and linguistic behavior of human beings. When we learn to spell, we follow the traditional practices in our culture, which are both descriptive and prescriptive.

DISCUSSION PLAN: Whose rule is it?

(p. 52, lines 14-15)

Whose rule is it?

- 1. Don't play with matches.
- 2. No talking during the fire drill.
- 3. Boys and girls take turns cleaning the board.
- 4. The children set the table.
- 5. No driving over 55 mph.
- 6. Don't feed the animals.
- 7. Love they neighbor as thyself.
- 8. Al! men are created equal.
- 9. Don't say "ain't".
- 10. Cross only at corners.

MW

DISCUSSION PLAN: Analogical reasoning and everyday experience (p. 52, lines 19-20)

Jenny has apparently been to the zoo before, or she has read books about zoos. In any case, she knows what to expect when it comes to the sort of signs one encounters in zoos. Based on her past experience, she is able to reason, by analogy, as to what this upcoming zoo trip will be like. She can't be totally sure, of course. She can only be approximately sure. But she presumes, apparently, that if this zoo is like other zoos (if al! things, in other words, are equal), the signs in this zoo will be like the signs in other zoos. The reasoning is analogical.

In the following cases, what do you think the previous experience of the speaker was, that would lead the speaker to make such a comment? In what way could changed circumstances lead to different expectations?

- 1. Doris: "I'm next up to bat in the softball game. I'll bet I strike out."
- 2. Mitch: "We sure needed that rain! I'!! bet the grass really shoots up this coming week."
- 3. Tanya: "I'm sure it will be a nice birthday party, with a yellow sponge cake with white icing, and nine candles to blow out."
- 4. Hilary: "I haven't read *Pixie yet*, but I've read lots of other books for kids. Why should *Pixie* be any different?"
- 5. Mortimer: "This is a great high-wire act. I'm sure there won't be an accident."
- 6. Trini: "If I slap this mosquito, it will die."
- 7. Linda: "Next year I'!! go to fifth grade!"
- 8. Boris: "Sooner or later, when I flip this nickel, it will come up heads."
- 9. Natasha: "Sooner or later the sun will rise in the west."
- 10. Cecilia: "When I grow up, I'm going to get married and have three children, two girls and a boy."

ML

DISCUSSION PLAN: Living with and without rules

(p. 53, lines 6-7)

- 1. Jenny says there's "no such thing as a game without rules." Is she right?
- 2. Can there be a family without rules?
- 3. Can there be a school without rules?
- 4. Can there be a friendship without rules?
- 5. Is it possible that there *are* rules in a friendship, but they just aren't ever spelled out?
- 6. Can a country have rules but no laws?
- 7. Can a country have laws but no rules?
- 8. When you are impolite, are you breaking a rule?
- 9. When you do the wrong thing, are you breaking a rule?
- 10. When you commit a crime, are you breaking a rule?

EXERCISE: Rules and principles

(p. 54, lines 9-16)

Mr. Mulligan tells Rusty that his comment was not a rule, but a principle. But Mr. Mulligan doesn't explain the difference.

Pixie, however, has already suggested what the difference might be: rules tell us how we *should* act; principles tell us how things do happen.

Thus, gravitation is a principle of physical science. It doesn't tell people how they ought to behave. Instead, it is part of our general understanding of how things work in the world. And a principle of mathematics is part of our general understanding of how things work in mathematics.

Would you classify the following as illustrations of rules or principles?

		Rule	Principle	?
1.	Mr. Smith: "Johnny, I want you to be in bed every night by nine o'clock and not a minute later."			
2.	Mr. Smith: "As a rule, I go to bed every night at 11:15."			
3.	Glenda: "There goes my balloon! I filled it with hydrogen and the string broke!"			
4.	Ted: "This ship floats on water, even though it carries a heavy load of steel."			
5.	Gary: "This submarine sinks to the bottom of the ocean, even though it's filled with air."			
6.	Fred: "When swimming, breathe through your mouth."			
7.	Zelda: "I'll say this for water: it sure is wet."			
8.	Mike: "When an odd number is added to an odd number, the result is an even number."			
9.	Lou: "Stay out of drafts."			
10.	Nell: "The longer you live, the older you get."			

ML

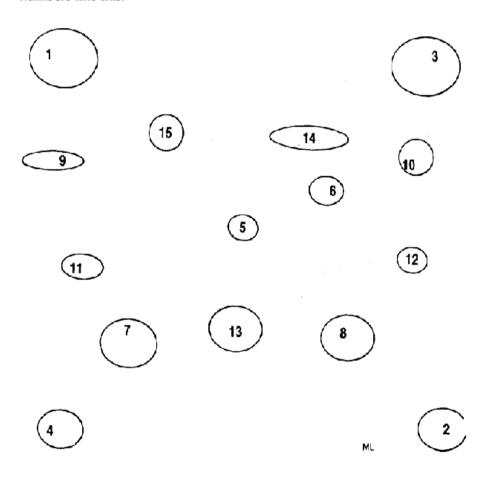
(p. 54, line 11)

Make up lots for all the members of the class—that is, numbers on folded slips of paper. Class members then choose the order in which they will play the game. Divide the class evenly so as to make two sides.

The object of the game is to connect the numbers on the blackboard. The first player draws a line from 1 to 2; the second from 2 to 3, and so on.

You cannot touch a line, except the lines of circles that have already been touched, or the circle you are going to.

If you touch, your point doesn't count. If you don't touch a line, you get a point. The team with the most points wins. You can arrange your numbers like this:



Episode 4

(pp. 55-58)

Inventing unbelievable stories

During the bumpy bus ride to the zoo, the children complain to Mr. Mulligan that they need practice in making up stories. He proposes in response that they spend their time on the bus inventing the most unbelievable stories they can think of. Presumably he is asking them to invent "tall tales" such as one would find in Paul Bunyon or Baron Munchausen. Why would a teacher ask them to do such a thing? Probably because it gives them practice in imagining, and also, because the stories tend to be counterfactual, it releases the children from t' he constraints of everyday reality.

Adam: reason without experience

The children continue to object that they don't know how to go about making up unbelievable stories. So Mr. Mulligan offers to help them. He proposes a thought experiment. Imagine, he suggests, a visitor from out of nowhere. His name it Adam, and he knows language, including both words and their meanings. However, he has no experience and, therefore, no memories. Presumably Adam is a reasonable individual. He would be able, the students say, to infer from the word "student" that they are people who study.

Two accounts of the origin of students

Mr. Mulligan repeats his request for an unbelievable story. Suppose, he says, Adam were to ask where the students came from. What could he be 'told? Robert offers the incredible explanation that the students were once as tall as mountains but have gradually *shrunk* to the size they now are. Pixie promptly offers an alternative explanation: The students were once tiny little specks but have gradually *grown* to the size they now are.

Must the truth be believed?

Tommy protests that Pixie's story is different from Robert's because Pixie's story is true, and a true story can't be unbelievable. Pixie replies that truth and falsity have nothing to do with believability, and Mr. Mulligan supports her.

Results of the thought experiment

The thought experiment which Mr. Mulligan initiated and which Robert and Pixie so beautifully completed, represents a decisive challenge to the unaided reasoning powers of human beings. Adam, the mythical creature they had invented, represents reason without experience, which is demonstrably incapable of distinguishing between solid fact and the wildest fantasy. *Only experience* can tell fact and fantasy apart.

We know from experience that every human being begins life as a tiny cell and gradually grows to adulthood. We have no experience of human beings who start out as giants and shrink to their present size. Therefore, it is not our reason, but our experience, that tells us that one of these accounts is correct and the other incorrect. Poor Adam, lacking any experience whatsoever, is incapable of telling which of the two accounts is correct. He thus demonstrates that reason without experience is completely helpless when it comes to matters of fact.

DISCUSSION PLAN: Practice

(p. 55, line 11)

- 1. Do you think you needed practice in combing your hair in order to be able to comb your hair?
- 2. Do you need to practice going to sleep before you can sleep?
- 3. Do you need to practice eating before you can eat?
- 4. Do you think you could have learned to tie your shoelaces without practice?
- 5. Are there some things you can do well without practice?
- 6. Are there some things you can do well only if you practice?
- 7. Are there some things you can do without practice, but you need to practice before you can do them *well?*
- 8. Do you think, if you practiced a lot, you could learn to drink coffee regularly?
- 9. Do you think, with practice, you could develop good habits?
- 10. Do you think with practice, you could develop *bad* habits?
- 11. What good is practice?
- 12. What is practice?

DISCUSSION PLAN: What is it like to make up a story? (p. 55. line 10)

- 1. In making up a story, do you think of the end first, or the beginning first?
- 2. Is it possible to have a nice beginning for a story pop into your mind, and then all you have to do is invent the ending?
- 3. Is it possible to have a nice ending for a story pop into your mind, and then all you have to do is invent the beginning?
- 4. What do you think of first when you make up a story—what happens in the story, or the people in the story?
- 5. Does a story have to have "good guys" and "bad guys"?
- 6. Does a story have to be funny?
- 7. Does a story have to be sad?
- 8. Do you like stories that make you think?
- 9. Do you like stories in which everything seems real, or stories in which everything is make-believe?
- 10. Would you rather make stories up and tell them to other people, or have other people make them up and tell them to you?

ML

DISCUSSION PLAN: What is unbelievable?

(p. 55, line 21)

- 1. Do you think you could make up a story that no one—absolutely no one—would believe?
- 2. If you could make up a story that only one person in all the world would believe, who do you think that person would be?
- 3. If you could make up an unbelievable story that only one person in all the world would believe, would it any longer be unbelievable?
- 4. Could a story be unbelievable, and still be true?
- 5. Could a story be believable, and still be false?
- 6. Are there things you believe that no one else believes?
- 7. Are there things that you don't believe, that everyone else believes?
- 8. Are there things you believe even though you don't want to believe them?
- 9. Are there things you don't believe, even though you'd like to believe them?
- 10. Have you ever believed something for a long time, then stopped believing it?
- 11. Have you ever refused to believe something for a long time, then started believing it?
- 12. If someone offered you a million dollars to believe that the world was flat, would you do it?

ML

EXERCISE: Reason and experience-two ways of finding out

(p. 56 lines 16-18)

When we speak of "experience," one thing (not the only thing) we mean by it is "sense experience," that is, what we find out by tasting, touching, smelling, hearing and seeing.

When we speak of "reason," one thing (not the only thing) we mean by it is "successful thinking," that is, drawing conclusions from premises correctly. In this sense, reason is good thinking. Another example is using one's knowledge effectively, as when we classify or define our terms appropriately. Consider the following situations, and say whether you

think they tend to illustrate reason or experience. (They are generally, if not always, a mixture, but one type maybe emphasized more than the other.)

			Reason	Experience	•
1.	Joel: Dolly:	"We always have fish on Friday, and today's Friday. Guess what we're having for lunch." "Fish."			
2.	Joel:	"There's a wonderful odor coming out of the kitchen. Do you smell it?" "Yes."			
3.	Joel: Cook: Joel:	"What's being served in the cafeteria today? It smells like fish." "It is fish." "Oh, so that's why it smells like fish."			
4.	Joel: Dolly: Joel: Dolly:	"Have you ever smelled or eaten fish before, Dolly?" "No." "Well, this is fish. What does it taste like?" "Fish."			
5.	Joel: Dolly: Joel: Dolly:	"Do you know what kind of fish we're eating, Dolly?" "Yes." "What kind is it?" "Flat."			
6.	Joel: Dolly:	"This, Dolly, is a flounder." "I thought you said it was a fish."			
7.	Joel: Dolly:	"Don't you love the way the crust crumbles in your mouth, Dolly?" "How did you know?"			
8.	Joel: Dolly: Joel:	"If you put tartar sauce on, it'll taste better." "It tastes worse." "I said to put on tartar sauce. You put on sugar."			

ML

EXERCISE: Inferences from a word

(p. 57, lines 1-2)

Isabel says that if someone is called a "student," it can be inferred that one studies, but Neil disputes Isabel's claim.

What can you tell from a word for a person or thing as to what that thing or person *does?* For example, what do *rivers* do? What do suns do? What do *businessmen* do? What do *jumpers* do?

Consider the following instances, and say what you think can be inferred as to what each one does. Then say whether you know it *as a fact,* or you figured it out *just from the word*.

		What they do	How you know it
1.	magnets		
2.	runners	·	·
3.	boats		-
4.	ranches		
5.	speakers		-
6.	ponds		-
7.	blue jeans		-
8.	soft drinks		-
9.	adhesive tapes		-
10.	livers		
11.	pants		
12.	socks		
13.	dresses		
14.	paste		
15.	workers		

DISCUSSION PLAN: Which is more believable and why?

(p. 57, lines 20-25)

- 1. a. The earth is round.
 - b. The earth is flat.
- 2. a. Girls are better at art than boys.
 - b. Boys are better at art than girls.
- 3. a. Grownups always teach kids.
 - b. Kids sometimes teach grownups.
- 4. a. Animals bigger than houses used to live on earth.
 - b. Animals are pretty much the way they always were.
- 5. a. Good singers are born, not made.
 - b. Good singers are made, not born.
- 6. a. The New York Yankees will win the World Series next year.
 - b. The Yankees will lose the World Series next year.
- 7. a. The universe will last forever.
 - b. The universe has a beginning and an end.
- 8. a. Only humans can speak.
 - b. Other animals can speak but people can't understand them.

MW

DISCUSSION PLAN: Boasts, exaggerations, tall tales and downright lies (p. 57, lines 20-25)

- 1. Can you exaggerate without boasting?
- 2. Can you boast without exaggerating?
- 3. Can you boast without lying?
- 4. Can you exaggerate without lying?
- 5. Is a tall tale better if it is believable or unbelievable?
- 6. Consider the two following stories by Baron Munchausen. One seems to be believable, the other unbelievable. Which makes the better tall tale?
 - a. During a heavy snow, I dismounted from my horse and tied the horse to a pointed post. The next day, when I awoke, I found that it had turned very warm, and the snow had melted. Then I heard a neighing. When I looked up, I found that my horse was tethered to the point of the church steeple!
 - b. It was extremely cold on the trip. The soldier accompanying me kept trying to blow his bugle, but it wouldn't play. When we arrived at an inn, he put the bugle on the mantle of the fireplace After a while, the music thawed out, and the bugle kept us entertained with music for at least an hour!
- 7. Are boasts funny? Are lies funny? Are exaggerations funny? Are tall tales funny? Can you think of reasons for any differences?
- 8. Is it easier to make up an untrue story or a true one?
- 9. Would you rather listen to
 - a. a funny false story
 - b. a funny true story
 - c. a false story that's dull
 - d. a true story that's dull
- 10. What's the thing you like most about tall tales? What do you dislike most about them?

EXERCISE: Truth

Page Directions: Tell whether the following statements are true or false and give your reason or reasons.

		True	False	?	
1.	If Carol has 24 cents, she has a quarter.				
2.	Alice in Wonderland is a real person.				
3.	A geranium is a flower that grows in a pot.				
4.	Airplanes can fly higher than birds.				
5.	A plum is a fruit.				
6.	Story-tellers are people who always tell stories.				
7.	A friend is someone you can trust not to tell others your secrets.				
8.	A bicycle can carry four people.				
9.	It snows every winter.				
10.	All kids like ice cream.				
11.	Abraham Lincoln was a president of the U.S.				
				ML	
EX	EXERCISE: "Where did they come from" (p. 57, line 6)				

Suppose this news item just appeared in your local paper:

PURPLE APPLEBONKERS FROM PLANET MERCURY LAND ON EARTH

An army of Purple Applebonkers from the planet Mercury today landed on Earth. They carried banners, pennants and flags, and were accompanied by many brass bands and travelling circuses.

The leaders of the Applebonkers immediately announced that there would be a writing contest for Earthchildren. Winners would be treated to a trip to Mercury to see where the Applebonkers stored their purple apple pits.

The theme of the essay contest is How to Bore a Child

Essays should be approximately two or three sentences in length.

Your assignment is to enter the Applebonker Essay Contest.

(p. 58, line 5)

Adam has had no experience of the world. As a result, he can draw no analogies, on the basis of what has been, to what might be.

If we know that the weather has generally been cold in North Dakota at Christmas, we can infer, by analogical reasoning, that this coming Christmas in North Dakota will also be cold. But if we have had no similar experience, we would have no basis for making an analogy.

This is Adam's problem. Having had no experience of how other things come into being, and having had no experience of how children come into being, he simply is unprepared to reason analogically about the children in front of him, and how they might have arrived there (if indeed they were not always there).

Consider the following incident, and then discuss the problem situations:

One day, Mr. Mulligan said, "Today we're going on a field trip. We're going to visit the Biology laboratory in the high school."

The high school students in the Biology laboratory were examining frogs. They had cut a number of them open, and Pixie and Isabel and the rest of Mr. Mulligan's class could see that each and every frog had a heart.

The next day, Mr. Mulligan came to class with a paper box. "What's in the box?" everyone wanted to know.

"A frog," Mr. Mulligan replied, and he opened the box and showed it to the class. There was a big green frog inside.

"Without cutting this frog open," said Mr. Mulligan, "what can we say, does it have a heart or not?"

Neil said, "Aw, who knows?"

Chita said, "In lots of ways it seems to be like those frogs we saw. So I'll bet, it's like them in that way too. It *probably* has a heart."

- 1. The students in Mr. Mulligan's class have been examining all sorts of rocks. The next day, Pixie comes to class with a box, and says there's a rock inside. "Without examining it; what can you say about it?" she asks. "It's probably hard," says Robert. Do you agree with Robert?
- 2. The students have been examining different kinds of potatoes. They note that all of them grow under ground. The next day Geraldo brings a yam to class. Do you think that it probably grew under ground?
- 3. The students have been examining different varieties of white grapes. They all grow from vines. The next day, Kate brings still another kind of white grape to class. Do you think it grew from a vine?
- 4. The students have been examining many different kinds of apples. They all grew on trees. The next day, Brian brings a tomato to class. Do you think it grew from a tree?
- 5. The students have been examining many different kinds of cats. They all have tails. The next day, Isabel brings a cat in a box. She says it's a Manx cat. Without looking at it, can we say it has a tail?
- 6. The students have been examining frogs. They discover that the blood of frogs circulates. Would this be a good reason for their saying that the blood in a stone circulates?
- 7. Do you think you can make a reliable analogy when the things you're comparing are not very similar?
- 8. Even if the things being compared are similar, could you be wrong?

ML

PROBLEMS FOR DISCUSSION: Analogical reasoning

- 1. Martha: "I've been watching the people who come out of the front door of the school. The last three people who came out were wearing shoes. I'll bet the next one who comes out will also be wearing shoes."
- 2. Emma: "I've been watching the weather. It has now rained on three Tuesdays in a row. All the other days have been clear. I'll bet next Tuesday will be a rainy day."
- 3. Gil: "Last night, on my short wave set, I picked up the voices of three Martians. I'll bet that, if Martians talk just like us, they must also think like us, feel like us, and look like us."
- 4. Jody: "I've been watching the assembly-line in this radio factory. The last three radios that came off the assembly-line were portables, so I'll bet the next one is a portable."
- 5. Patricia: "Three times in my life I've found a coin on the ground, and each time it was a quarter. I'll bet the next time I find a coin on the ground, it will be a quarter."
- 6. Clem: "Each year for the last three years, I've had a tall teacher. I'll bet next year too, my teacher will be tall."
- 7. Horace: "I've now read the first three sentences of this book, and each sentence ends with either a period, a question-mark or an exclamation-point. I'll bet the next sentence is no different."
- 8. Irene: "For the last three days, I've had a toothache. But I'll bet tomorrow will be different, because tomorrow I go to the dentist."
- 9. Cass: "For the last three years, people have told me I'm too old to have a baby-sitter, and too young to be a baby sitter. I must really be in a rut."
- 10. Kay: "I have three good friends: Millicent, Marcia and Mary. Now Goldie wants to be my friend, and I really like her. But her name doesn't begin with an 'M'."

EXERCISE: Reasoning problems for analysis

Some jokes or verbal exchanges are the produce of different interpretations of ambiguous words. Others result from the awkwardness or inappropriateness of analogies. Still others are examples of someone's committing a "logical fallacy." Can you analyze the following, in accordance with the questions in the right-hand column?

1. Frank: "My uncle is President of the United States."

Ed: "Really?"

Frank: "Yep, he told me so himself."
Ed: "But suppose he lied to you?"

Frank: "Don't be silly! Would the President lie?"

What's Frank trying to prove? In the last line, what's he assuming to be true?

Phyllis: "I was wide awake all last night because I couldn't sleep."
 Millicent: "That's funny. I couldn't sleep all last night because I was wide awake."

Do 'wide-awake' and 'unable to sleep' mean the same thing? If so, aren't the girls saying that something caused itself? If not, could they both be right?

3. Buck: "I'm sorry, Spud, but I just can't agree with you."

Spud: Well, that's too bad, because now I'm going to have to *make* you agree with me."

Is force a form of reasoning? Is reasoning a form of force?

4. Gwen: "Sears Roebuck and Co. makes the best ice cream."

Tracy: "How do you know?"

Gwen: "Wilma told me, and she ought to know. She always gets A's in spelling."

Do you think Wilma is a proper authority on ice cream? If not, give two reasons why Gwen shouldn't cite her as an authority.

5. Seth: (watching a pair of kissing fish in a tank) "Gee – I wish – I

wish I were doing that."

Alice: "Well, it's your fish!"

Is Seth trying to make an analogy between what fish do and what people do? Does Alice accept the analogy?

- 1. Did I learn anything from my students discussion of rules?
- 2. Do I see rules in a new way now?
- 3. Do my students know I learn from them?
- 4. Did my students sense my puzzlement and wonder when we discussed truth?
- 5. Did I learn anything from my students when we discussed freedom?
- 6. Do my students perceive me as a person who not only likes to inquire but *needs* to inquire?
- 7. Can my students distinguish the function of rules in regard to language arts, math, chess, checkers, or baseball?
- 8. Can my students distinguish between a rule and a principle?
- 9. Do my students look to me to clarify how to proceed during a discussion?
- 10. Do my students look to me for answers about such things as the nature of mind or freedom?
- 11. Am I more aware of what is involved in the *method of inquiry*?
- 12. Have my students internalized this method to the extent that they can conduct vigorous philosophical discussions among themselves?

CLASSROOM DIALOGUE					
Data					
Date		-			
Topic					

WHAT THE STUDENTS ACCOMPLISHED DOING THIS CHAPTER

EXERCISES IN THIS CHAPTER THAT WORKED

Specific Skills Taught **REASON THEY WORKED** Specific Skills Reenforced Specific Skills to Work on in the future

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CHANGES I WOULD MAKE NEXT TIME I DO THIS CHAPTER OTHER SOURCES THAT RELATE TO THEMES IN THIS CHAPTER **CORRELATED EXERCISES CHILDREN'S LITERATURE** I WOULD USE Stories Play **MOVIES** ART WORKS AND PROJECTS MUSICAL COMPOSITIONS AND PROJECTS **DANCE EXERCISES OTHER**

OVERLAPPING THEMES FROM THIS CHAPTER WHICH OCCUR IN OTHER DISCIPLINES I TEACH

CHAPTER EIGHT

Episode I

(pp. 59-62)

Brian and the giraffe

Until this episode, Brian has not talked. In this episode, he talked to a baby giraffe, and Pixie and Isabel heard him. First, the giraffe came over to him. Then Brian reached out his arms, and the giraffe nuzzled him. The the giraffe stood back and looked at Brian. It was after this that Brian spoke. Why? (Your students may wonder why the giraffe chose Brian to nuzzle). The giraffe's action reinforces the image presented of Brian as someone different and unusual, in fact so unusual that even animals recognize the difference.

Recognizing the giraffe's beauty

Brian then tells the giraffe that it is beautiful. His statement is noteworthy, first, because up until this point, Brian hasn't talked, and second, because when he does talk, he comments on the giraffe's beauty. It would appear that Brian was so moved by the beauty of the giraffe that he couldn't keep from expressing himself about it. Here is a magazine reporter's account of a visit to a circus giraffe:

The giraffe, inquisitive, turns his neck around to investigate. The way that neck moves is a beautiful sight. The beast himself is unbelievably beautiful: the proudly held head with the tiny, humorous horns; the long nose; the black velvet eyes, with their short brushes of downward-slanted lashes. When he walks around the arena, he moves like a mobileone piece at a time. The legs push the body forward; the body propels the head on its endless neck. And how does a giraffe go to sleep? Lying down, it twists its neck around and lays its head to rest upon its back.

The New Yorker, May 25, 1981. pp. 36-37

Brian's explanation of his silence

Pixie finds Brian's talking to the giraffe annoying in view of his refusal to talk to her, but then when she does address him, he does talk to her. She asks him why he stopped talking, and he says that he never stopped talking to animals. As for people, there seemed to be two reasons why Brian stopped talking to them: (1) They seemed to talk too much and too loud,

and (2) when Brian did talk, his remarks seemed to make no difference to people.

Why has Brian's attitude changed?

If you ask yourself why does Brian think that his remarks make a difference now, it could be a number of things. The class as a whole has been involved in inquiry. Brian has been active with Mr. Mulligan and the others in discussing models, analogies, similes, metaphors, time, space, the mind. His classmates have take his contributions into account, and have taken him seriously. So has Mr. Mulligan. Perhaps for the first time in a long time, Brian has begun to think that his words *could* make an important difference. If others take him seriously, perhaps he should also take himself and his own thoughts seriously. One indication of his newly acquired confidence is his willingness to communicate his thoughts to others.

Pixie's role in Brian's change

Pixie is happy that she was the first human being that Brian chose to speak to. Why? Perhaps, in her own way, Pixie has been quite instrumental in allowing Brian to express himself. Remember when Brian, Pixie, and Mr. Mulligan stayed after school to talk about relationships, space and time? There seemed to be very little doubt that she was taking his contributions seriously. For all of her mischievousness, Pixie is seriously interested in the same kinds of questions that Brian is. She might feel that if only he would start speaking, they would have a lot to say to each other. They could also learn a great deal from each other.

DISCUSSION PLAN:

Reasoning analogically about tastes and preferences (p. 59, lines 5-18)

Jenny seems to like parrots and Tommy seems to like flamingoes. Some people in the class seem to like sandwiches more than others: Nikki gave half of hers to the squirrels.

In all of this, we are dealing with tastes and preferences. Can we reason analogically about these? Consider the following episode, then discuss the problem situations:

One day, Rusty said to Kate, "I like to swim, and you like to eat. I like to look at TV and you like to read. Our tastes are completely different. I can't understand your tastes and you can't understand mine."

"Well," said Kate, "which do you prefer, swimming or floating?" "Swimming," said Rusty.

"Okay," Kate replied. "I prefer pizza to ravioli, and I prefer reading Black Beauty to reading Stuart Little."

Rusty said, "So what's that prove?"

"It seems to me," said Kate, "that the way I prefer one thing to another is the way you prefer one thing to another. It doesn't matter what things they are. I can understand your preferences and you can understand mine."

- 1. Jenny says, "I like Rusty more than I like Tommy, and I like Tommy more than I like Neil. So I guess I like Rusty more than I like Neil."
- 2. Willa Mae says, "I prefer books to movies in the same way that Gera!do prefers movies to books."
- 3. Chita says, "Robert and I are completely different. He likes girls and I like boys."
- 4. Robert wonders, "How can I prove to Isabel that I like hopscotch as much as she does?"
- 5. Neil wonders, "How can I prove to Pixie that I like football more than she likes hopscotch?"
- 6. Tommy says, "If Brian prefers Willa Mae to Pixie, then it can't be true that he prefers Pixie to Willa Mae."
- 7. Kate says, "I like chocolate cake more than I like apple pie. And I hate spinach more than I hate gooseberries. So what's that prove?"
- 8. Brian says, "in my opinion, Kate prefers gooseberries to spinach, but not in the same way that she prefers chocolate cake to apple pie." ML

DISCUSSION PLAN: Animals and people – how are they different? (p. 59, lines 11-13)

- 1. A school of fish; a school fu!! of children.
- 2. Beavers building a dam; workers working on a construction project.
- 3. A dog wagging its tail; a child smiling at a friend.
- 4. A squirrel storing nuts for the winter; your father saving money for your college education.
- 5. Birds flying south for the winter; your family going to Disneyland during Christmas vacation.
- 6. A lion hunting zebra; your parents shopping at the supermarket.
- 7. A hive of bees; the people who a!! live in the same apartment house.
- 8. An otter washing his food before eating it; your mother washing fruits before she puts them in the refrigerator.
- 9. A dog barking at someone coming up the path; you answering the telephone when you hear it ring.
- 10. Two dogs sniffing at each other; a child having a conversation with the child that just moved next door.

MW

EXERCISE: The President's Cat

(p. 59)

Each player must supply a word that describes the President's cat. Players begin with words whose first letter is a, and they continue through the alphabet.

The first player may say, "The President's cat is an aged cat," (or an able cat, or an Angora cat, or an argumentative cat, or an asinine cat, etc.) The second player may say, "The President's cat is an abominable cat (or an ardent cat, or whatever—beginning with a).

When a player is reached who cannot supply a word beginning with a, that player must drop out, and the next player must find a word beginning with b. (The President's cat is a beautiful cat, or black, or bitter, or bumpy, or bent, or whatever.)

EXERCISE: Beast, bird, fish, vegetable, mineral

(p. 59)

Any number of players sit in a circle, with one player standing in the center. The player in the center suddenly turns to one of the seated players, points to him or her and says, "Beast, one, two, three, four, five, six, seven, eight, nine, ten." The person to whom he or she points must have named a beast by the time the count reaches ten. If not, the seated player must exchange places with the person in the center.

The next demand is for a bird, the next for a fish, and so on. The person in the center should always make the demand as surprising and sudden as possible, so that the player will be obliged to think and answer quickly.

ML

DISCUSSION PLAN: Brian and the giraffe

(p. 60)

- 1. Have you any idea why Brian might have picked the giraffe to talk to?
- 2. Do you think the giraffe was Brian's mystery creature?
- 3. Are giraffes very "talkative"?
- 4. Do you think Brian has very special feelings with regard to animals? If so, do you think the young giraffe knew this?
- 5. Do you think the giraffe would have come over to anyone the way it did to Brian?
- 6. Can people speak to animals so that the animals understand?
- 7. Can animals speak to people so that the people understand?
- 8. Do you think the giraffe may have had a special reason for nuzzling Brian?
- 9. Why do you think Brian said the giraffe was beautiful?
- 10. Do you think that Brian's saying that made the giraffe run away?
- 11. Do you think Brian really wanted to speak to the giraffe, or do you think he couldn't help saying what he said?
- 12. Have there been times when you didn't want to cry, but you cried anyhow?
- 13. Have there been times when you didn't want to laugh, but you laughed anyhow?
- 14. Have there been times when you didn't want to speak, but you spoke anyhow?
- 15. Why do you think it annoyed Pixie that Brian spoke to the giraffe?
- 16. Do you think there is an analogy between what the giraffe did to Brian and what the Prince did when he kissed Sleeping Beauty? ML

DISCUSSION PLAN: Brian's explanation of his silence (p. 61, lines 19-23)

- 1. Why does Brian begin talking to people again?
- 2. Why do you think he chooses Pixie to begin talking to?
- 3. Why do you think Brian "never stopped talking to animals"?
- 4. Do you think Brian's reasons for not talking were good ones?
- 5. Do you think Brian's reason for talking again was a good one?

ML

DISCUSSION PLAN: Communication

(p. 60, lines 24-26)

Which of the following are instances of communication?

- 1. Jimmy hollered over the deafening roar of the engine.
- 2. Mary, looking around, after she finished the story, saw that Judy was fast asleep.
- 3. "Please let me go, I didn't do it," said the man, as he was led away and handcuffed.
- 4. Mrs. Smith seemed much happier after she saw the sign: "English spoken here."
- 5. "I'm at the end of my rope," said Mrs. Green. "Tommy just won't eat any vegetables."
- 6. "You just can't reason with a baby," Judy sighed, when she saw the scribbles all over her new coloring book.
- 7. "Young man, as long as you live in my house, you'll obey my rules," Mr. Gable said angrily.
- 8. "You'll never understand what I mean until it happens to you," Milly said to her best friend.
- 9. "I know what I read in the magazine, so don't try to change my mind," said Tim.
- 10. "I know what I like, and that's that!" said Sonny to Frank.

MW

Episode 2

(pp. 62-67)

Criteria of recognition

Pixie realizes that she knows only the name of her mystery creature and would not know how to recognize it if she saw it. In other words, it has just occurred to her that knowing the name of something is not sufficient to identify it. There must be perceptual criteria as well. It is possible that Pixie thought that knowing the name would be enough, because things look like their names. But do they?

Names and signs

Pixie then says that the only thing left for her to do is to read each and every sign. Does she think that the name of a thing is a sign for that thing in a way analogous to the signs for the animals that are outside the cage? If each animal has a name that belongs only to it, that would help to explain how Pixie comes to make the mistake which will be revealed in this chapter.

Feeling excluded

It occurs to her also that all the students except her have now found what they came for. The feeling she has at this point must be very similar to the hurt she related when she didn't get invited to Ellen's birthday party.

Violating rules

Once again Pixie breaks the rules about staying together, and slips off to try to find her mystery creature. Ask your students if they think Pixie had a good reason for breaking the rule.

A gorilla by a different name?

Why is Pixie so frustrated after the zoo guard answered her question by pointing to a gorilla and saying, "There's one!"? Discuss with your class what Pixie's question must have been and what was the source of her confusion.

Confusing genus and species

Mr. Mulligan asks Pixie to tell something about her mystery creature and she does. She cites four features by which her mystery creature can be distinguished. However, even though she knows these four criteria, she doesn't know what her mystery creature looks like. It may seem implausible that Pixie would know all of these features, and still not know that her mystery creature is not a species but a *genus*—that is, a general grouping of specific kinds of creatures. Recall Pixie's interest in similes, metaphors, and analogies. She seemed to have a clear understanding of their differences, but got them thoroughly confused when reporting about them to her father. Somehow, when Pixie was learning the word "mammal," she must have thought it to be a specific animal, rather than a genus.

Mr. Mulligan then does the same thing as the guard. He mentions that there were some mammals who paid admission to get into the zoo. Naturally, this doesn't make any sense to Pixie, because she still hasn't realized that mammal is a class word.

Families and classes

At this point Isabel tries to explain the problem to Pixie, but Pixie cannot distinguish between families and classes. When Isabel says that people who are relatives of one another all belong to the same family, Pixie concludes that animals who are relatives of one another therefore all belong to the same mammal.

A faulty analogy?

Pixie is proceeding on a false analogy. The assumption that if the word "family" stands for all the members of the group who bear certain relationships with one another, then the word "mammal" must perform an analogous function with regard to animals is not the result of poor reasoning, but the result of not knowing that the two concepts "family" and "mammal" themselves are not analogous. Pixie would know this only from experience. *Families* are groups that contain members which are all related to one another. *Mammals* are animals that share certain characteristics.

Classes and class-membership

Pixie's classmates try to explain to her that "mammal" is a class name and not a family name. They point out that members of the same class have some feature which they possess in common in the sense that the redheaded people in the world make up the class of red-headed people. They also explain to her that the class does not generally have the feature possessed in common by its members: As Kate says, "The class of redheaded people isn't itself red-headed."

Do classes exist?

Pixie then objects that her friends are telling her that the class doesn't possess the features shared in by all of the members. What they're still not telling her is whether the class actually exists. Are there mammals or aren't there?

To give Pixie her due, she is not the only one who has ever thought this way. For example, we use the expression "man." Most of us would agree that there are only individual human beings. However, there are some people who think that the word "man" is not just a class name, but stands for a real existing being.

Brian, Isabel and the consolations of philosophy

Brian tries to comfort Pixie by pointing out that, in a sense, all the mammals in the zoo were her mystery creature but this doesn't help Pixie. She still does not see why she didn't end up with a nice, warm, furry animal like he did. She suspects that class names do not refer to things that exist at all.

Brian and Isabel are both trying to look after her. They know she has been hurt and are trying to make her feel better. Again we see one of the constructive roles that children can begin to play with each other once they have formed a community of inquiry.

EXERCISE: Signs (p. 62, line 11)

Underline the word which you think fits best in the sentence.

- 1. The doctor had a (tooth) (goat) (sign) (view) in front of his office.
- 2. "I'll write the letter," he cried out, "but I'll never (read) (draft) (understand) (sign)it!"
- 3. When it was discovered that he stole the money, he was forced to (sign) (resign) (design) (consign) his job.
- 4. Smoke is a (part) (cause) (design) (sign) of fire.
- 5. We crept quietly through the forest, looking for a (piece) (sign) (billboard) (poster) of the wolf.
- 6. "Halt!" the sentry cried out—"give the secret (treaty) (sign) (creature) (story)."
- 7. Two little lines like this, " = ", are called an "equal (sign) (signal) (formula) (ratio)."

ML

EXERCISE: Fuzzy classes

(p. 63, line 18)

Sometimes, in grouping or classifying, we come across hard cases, either because we just don't have the appropriate knowledge for sorting them properly, or because they may just be borderline instances. This is where class boundaries get to seem fairly fuzzy. But it still may be useful (if only for training in the workings of analogies) to know that one thing is "something of the same sort" as another.

How would you classify the following:

			Belongs to the class of birds	ls a sort of bird	lsn't a bird	?
l.	1.	Robin				
	2.	Penguin				
	3.	Bat				
	4.	Ostrich				
	5.	Peacock				
	6.	Airplane				
	7.	Bumblebee				
	8.	Flying fish				
	9.	Flying squirrel				
	10.	Bird-shaped kite				

			Belongs to the class of persons	Is a sort of person	Isn't a person	?
II.	1.	Human adult				
	2.	Newborn human infant				
	3.	Your pet dog				
	4.	C3PO				
	5.	Gorilla				
	6.	Uncle Sam				
	7.	Santa Claus				
	8.	Godzilla				
	9.	General Motors				
	10.	Rodin's "Thinker"				

EXERCISE: Creatures and their names

(p. 62, lines 12-13)

Which of the following creatures resemble their names, and which do not?

	Resemble their names	Don't resemble their names	?
deer			
thousand-leggers			
oxen			
mothers			
coyotes			
baboons			
snakes			
boa constrictors			
spiders			
lobsters			
crabs			
chickens			
eagles			
sparrows			
tigers			
flamingos			
ostriches			
kangaroos			
pandas			
	thousand-leggers oxen mothers coyotes baboons snakes boa constrictors spiders lobsters crabs clams chickens eagles sparrows tigers flamingos ostriches kangaroos	deer	their names deer

ML

EX	ERCISE: Defining characteristics	(p. 64, lines 16-20)
1.	If it swims in the ocean and it breathes through gills	it is a
2.	If it is a tree and it stays green a!! winter, then it is ar	ı
3.	If it is the color of lemons, it is the color	·
4.	If someone is the son of your mother's brother then I	ne is your
5.	If it is a three-sided figure whose angles are equal to 180	O degrees, it is a
6.	If it is the Chief Executive of the U.S.A., then it is the	·
7.	If it is one yard long, then it is long	·
8.	If it is a country that is run by the votes of the people	e, then it is a
9.	If it is a group of buffalo that lives and stays togethe	r, then it is a
10.	If it is a mountain that grows from an eruption of ho	ot rocks and gas,
	then it is a	·
		MW
EX	ERCISE: Run away	(p. 64, line 22)

Each player lays his forefinger on a table. One player says, "Run away, deer; run away, cat; run away, horse; run away, bear." As these animals are named, the players all lift their fingers. But when something that is not a mammal is named (for example, "Run away, duck"), the players do not move their fingers. Whoever forgets and lifts his finger must drop out of the game.

DISCUSSION PLAN: Families and family-like organizations

(p. 65, lines 14-16)

- 1. What's the difference between a crowd and a class?
- 2. What's the difference between a baseball team in the locker room, and a baseball team on the field?
- 3. What's the difference between a group and a school staff?
- 4. What's the difference between a mob and an orchestra?
- 5. What's the difference between a band when the members are eating lunch and a band when they are giving a concert?
- 6. What's the difference between relatives and friends?
- 7. What's the difference between a school principal and a father?
- 8. What's the difference between a music teacher and the conductor of an orchestra?
- 9. What's the difference between a coach and a cheer leader?

ML

EXERCISE: All (or some or none) in the family (or class)

(p. 65, lines 14-27)

Make the following sentences true by filling in the blanks with either "Al!" or "Some" or "No." (If you aren't sure, put a question mark in the blank space.

1.	cats are brown.	11 churches are buildings.
2.	cats are animals.	12 anger is hot.
3.	flames are red.	13jobs are not hard.
4.	elephants have trunks.	14 pleasure is sweet.
5.	squares have corners.	15 thinkers have thoughts.
6.	thoughts are round.	16 thoughts are produced by thinkers
7.	thoughts have just one side.	17 systems are go.
8.	feelings are purple.	18 toothaches are pleasant.
9.	energy is electrical.	19 potatoes have eyes.
10.	buildings are churches.	20 happiness is wonderful.

ML

EXERCISE: Family relationships

(p. 65, lines 24-25)

Draw Tommy's "family tree' after you have answered the following questions.

- 1. Tommy, are your mother's parents related to you? What do you call them?
- 2. Tommy, are your father's brothers related to you? What do you cal! them?
- 3. Tommy, are your father's daughters related to you? What do you call them?
- 4. Tommy, are your father's grandparents related to you? What do you call them?
- 5. Tommy, is your father's mother related to you? What do you call her?
- 6. Tommy are your mother's sisters related to you? What do you call them?
- 7. Tommy, are your older sister's children related to you? What do you call them?
- 8. Tommy, are your mother's sister's children related to you? What do you call them?
- 9. Tommy, are your father's sisters related to you? What do you call them?
- 10. Tommy, are your mother's daughters related to you? What do you call them?

AMS

EXERCISE: Classes

(p. 66, line 3)

If all the following were members of one class, what would the name of the class be?

- 1. Owls, boomerangs, ladybirds, paper airplanes.
- 2. Hairs, railroad tracks, telephone wires, string.
- 3. Milk, blood, rain, the sea.
- 4. Speech, thunderstorms, avalanches, migrating geese.

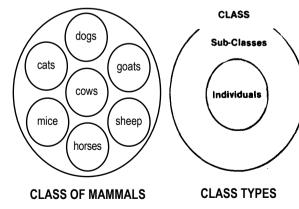
When you have named a class, can you suggest another member for it?

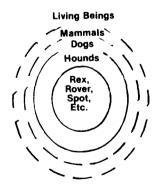
MJW

EXERCISE: Classes, class types and class members

(p. 66, line 3)

- 1. There are particular *individuals*, such as individual persons (Julius Caesar, Elvis Presley), individual animals (Lassie, Flipper), fictional individuals (Tom Sawyer, David Copperfield), individual countries (France, Japan), individual corporations (Genera! Motors, AT&T), etc.
- 2. A collection of individuals having a common feature or trait is called a class. For example, all creatures having warm blood belong to the *class* of warmblooded creatures. All creatures that nurse their young belong to the class of mammals.
- 3. Of course, there can be sub-classes: we can say that the class of mammals contains dogs, people, *dolphins* and cats. Thus, if *mammals* is taken as a class, then dogs, etc. represent sub-classes, and each sub-class contains individual members (like Rex and Rover).
- 4. On the other hand, class themselves may belong to still more inclusive groupings, which we can call *class-types*. (There can be, for every class, an indefinite number of more-inclusive class-types, just as there can be an indefinite number of less-inclusive sub-classes.)
- A. A class may contain many sub-classes:
- B. There can be concentric class-types, classes and sub-classes:
- C. A series of increasingly inclusive circles can be formed around a group of Individuals having common traits:





I. Can you fill in the blanks in the following:

Class-type	Class	Sub-Class	Individual Member
1. Beverages	a	canned	Coca-Cola
	b. fermented	bottled	-
	c. juices		
2. Cities	a. population of	American	-
	b. over 1,000,000	American	Milwaukee, Seattle, etc

II. For each of the above, can you construct sets of concentric circles and label them, as in the above diagram (right).

EXERCISE: Classification and categorization

(p. 66, line 3)

When we classify, we do so by putting similar things under a more general heading. Thus, we classify oaks, elm and pine as trees, and we classify ants, bees and wasps as *insects*.

Of course, it is easy to make mistakes in classification. A large plant may look like a tree but not be a tree. It belongs to a marginal group, and the error of classification is understandable.

But there is another kind of mistake, in which something is classified with other members of a group, and yet the thing in question couldn't possibly be a member of that group because it belongs to a different category altogether. And this we call a *category-mistake*.

For example, suppose we listed a pickup truck under the classification of "cars." That would be a mistake, but it wouldn't be a category-mistake. It would be a category-mistake if, under the category of "cars" we listed *summer*, or *blue*, or *honesty*. So one kind of category-mistake is to lump in one group things from a radically different group.

There is a second kind of category-mistake. The genus *mammal* contains many different species, such as dogs, horses, whales, etc. But the genus *mammal* is not itself a mammal, nor is the species *horse* a horse. In cases of this kind, we confuse our logical grouping devices (classes, genus, species) with the objects grouped under those headings.

For purposes of literal language, we try to avoid making category-mistakes, because they are often absurd. But for purposes of figurative language, categorymistakes may be of considerable interest.

In the following instances, identify the items which do not literally fit into the groups they are with. Then see if you can construct similes or metaphors utilizing such category-mistakes. For example, given the terms *oak*, *hickory*, *maple*, and *honest*, it is obvious that the last term, *honest*, has been included as the result of a category-mistake. But could one say, in a figurative sense, "as honest as an oak?" Here are some other groupings:

(1)	(2)	(3)	(4)	(5)
infancy	cheese	blue	bitter	concrete
old age	tobacco	yellow	sweet	asphalt
youth	bread	beauty	tangy	sand
childhood	decency	pink	sour	music
winter	spaghetti	red	time	dirt

ML

Episode 3

(pp. 67-70)

Sharing understanding

At the bottom of page 67, we notice something about Pixie. When she learns something new, no matter how much pain was involved in the learning, she immediately likes to share it with others. Recall the day she learned about analogies, metaphors, and similes: She told everyone at the dinner table, even though she previously had been sulking, after having had a tantrum. Now even though she has been hurt a great deal, she figures she will share what she has learned about families and classes with her mother.

Similar behaviors to show intentions

When the mother cat wants the kittens to come, it makes a noise that sounds like a purr and a growl at the same time. When Pixie wants to get in her mother's lap, she makes the same kind of noise.

A fortiori reasoning

Pixie's justification for sitting in her mother's lap is not simply that all the others in her class do likewise, but that she is just about the smallest one in her class. In other words, if they're not too big, surely she isn't too big. If it is right for the larger, it must be right for the smalle.

People fail to speak precisely

Soon Pixie stumbles on another problem. When people say that mammals nurse their young, they mean only female mammals. Pixie starts to cry because she thinks she is never going to understand. People do say "mammals nurse their young." They don't say "only female mammals nurse their young." It seems that one has to be very careful in believing all that people say. Often they assume a great deal on the part of the listener.

Pixie, by nature, it would seem, wants to understand

The fact that Pixie cries over the prospect of never understanding indicates what is important to her. She does want to understand.

Noting ambiguities

Pixie has endless questions. She has an especially keen eye for ambiguities. She now wants to know if it is possible to spell one word in two different ways.

Why are things the way they are?

Pixie is beginning to see that very few things are simple. When she asks her mother why, her mother answers, "to make you think." Pixie's mother suggests that there is a purpose behind the complexity in the world. It is an open question whether such complexity simply exists or is the result of deliberate planning. Pixie's mother's reply will eventually provoke Pixie to wonder if the complexity of the world does have a purpose.

$\label{eq:DISCUSSION PLAN: Classes and class membership problems$

(p. 66, lines 1-11)

Suppose Pixie goes to P.S. 37, a brand new school. She belongs to class 4A. There are 25 members in her class. All the members are nine years old.

- 1. Pixie's class works very well as a group. Does this mean each member of the class must work very well alone?
- 2. If all the members of Scout troop 209 are adventurous, does that mean that the troop is adventurous?
- 3. Everybody in Pixie's class was kept after school on Wednesday due to misbehavior. Does that mean the class was kept after school?
- 4. The day they were kept after school, every member of the class was angry. Does that mean the class was angry?
- 5. Each member of the class requires a bus pass. Does that mean that the class needs a bus pass?
- 6. Pixie's class was assigned 25 free tickets to the museum. Does that mean that each member in the class received 25 tickets?
- 7. Everyone in the class has two legs. Does the class have two legs?
- 8. Everyone in the class has a head. Does that mean that the class had a head?
- 9. Everyone in Pixie's class has a mother. Does that mean that the class has a mother?
- 10. Each member of Pixie's class received at least a "C" on the spelling test. Does that mean that the class received at least "C"?

AMS

EXERCISE: Classes and categories

(p. 66, line 3)

One way to tell classes from categories is to provide a test sentence that requires completion. Terms that make sense when put in the test sentence belong to the same category (although perhaps to different classes). Terms that make no sense belong to different categories.

For example, suppose the sample sentence is: "The ______ is sleeping." Which of the following words would make sense, and which would make no sense:

bear month of May number 17 little girl Wednesday

Thus the difference between "bear" and "little girl" is a difference of class. But the difference between those two terms and the other three is a difference of category.

In the following sentences, which terms make sense and which do not?

1.	Sentence:	" are handy with tools."
	Possible terms:	workers / triangles / monkeys / elephants / baseball bats
2.	Sentence:	" are often full of dirt and grime."
	Possible terms:	leap years / little boys / boots machine shops / radio waves
3.	Sentence:	" fold in the middle."
	Possible terms:	people / letters in the alphabet / books / some doors / Saturdays

Note: Remember, a sentence can be false and still make sense. (For example, "Wednesday comes right after Monday" is false, but not absurd. On the other hand, it makes no sense to say "December is putting on weight," or "Quadrangles are tasty.") Of course, what is absurd from a literal point of view may still make sense metaphorically.

DISCUSSION PLAN: Reasoning analogically in ethics (p. 67, lines 6-15)

When they see how unhappy Pixie is, Brian and Isabel try to comfort her. They speak kindly to her in order to make her feel better. Why do they do so? Perhaps they are able to imagine how she feels. (This is what is sometimes called *moral imagination*.)

Now, an act of moral imagination may very well involve analogical reasoning. Consider the following episode, and discuss the problem situations that follow.

Jenny's pet dachshund, Humperdinck, has been run over by a car and killed. Jenny is sitting at her desk, crying.

"We should all feel sorry for Humperdinck," says Willa Mae.

"He was just a dog," Neil replies. "How can I fell sorry for an of dog?" "We should all feel sorry for Jenny," says Isabel.

"Why should we?" Neil replies. "Nothing happened to her."

Robert says, "How many of us here have pets?" All the students raise their hands, including Neil. "What kind of pet do you have?" Robert asks Neil.

"A lizard," says Neil. "I keep it in a fish tank. I call it Godzilla."

"Neil," says Robert, "how would you feel if Godzilla got out of his tank, got out on your front driveway, and got run over?"

"Well," says Neil, "that's a very different thing from what Willa Mae and Isabel were telling me."

- 1. When someone accidentally dropped a wastepaper basket on Neil's toe, Isabel tried to remember how it felt when she got her thumb caught in the car door.
- 2. Tommy's father has lost his job, and his family is having a hard time. Jenny says, "I can't imagine what it must be like! My parents have always had jobs!"
- 3. Chita's brother steps on the cat's foot by accident and the cat lets out a loud screech. Chita picks up the cat and hugs it, while saying to her brother, "You hurt it!" "Oh, no," he replies, "animals can't feel pain."
- 4. Kate speaks lovingly every day to her plants. Her sister says to her, "Why bother?" "Funny," Kate replies, "that's the same thing people say to Mr. Mulligan."

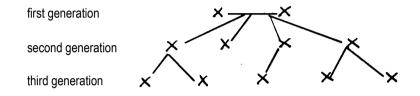
PROBLEM FOR DISCUSSION:

Do soldiers form a family as well as a class?

(p. 67, line 26)

Naturally, all the people who are soldiers belong to the class of soldiers. But do these soldiers also form a family?

Consider a model of family organizaton: one generation gives birth to a second, the second to a third, and so on. The members of the family are related to one another by kinship ties, or by "Blood relationships." Thus:



Now consider a military organization. The higher ranks give orders to the lower ranks, but never the other way around. The soldiers are not relatives of one another. There is a series of positions, from the top to the bottom:

general
colonel
major
captain
1st lieutenant
2nd lieutenant

master sergeant staff sergeant enlisted men sergeant corporal

corporal private

What further similarities and dissimilarities can you see between army organization and family organization?

The human species is sometimes called "the family of man." Is this literally so, or is it a *figure* of speech?

EXERCISE: Same and different

(p. 69, lines 2-5)

Say whether you think the sentences that follow have the same or different meanings.

		Have the same meaning	Have different meanings	?
1.	No one from this class went to the store. No one went to class from this store.			
2.	Those in this class are either boys or girls. This class contains both boys and girls.			
3.	Only men and women are in this class. No boys or girls are in this class.			
4.	Some boys are in this class. Some girls are not in this class.			
5.	Some boys and girls are in this class. No men or women are in this class.			
6.	None but girls are in this class. This class contains only girls.			
7.	Some members of this class are boys. Some boys are members of this class.			
8.	Everyone in this class is a girl. Each person in this class is a girl.			
9.	If it's a member of this class, it's a girl. If it's a girl, it's a member of this class.			
10.	There are only children in this class. Only in this class are there children.			

ML

DISCUSSION PLAN: Spelling

(p. 69, lines 14-20)

- 1. Why do we have to learn to spell?
- 2. Should everyone spell the same way?
- 3. Must everyone with the same name spell it the same way?
- 4. Can we spell "bright", "brite"?
- 5. How do you know what a person is trying to write if they spell the words wrong?
- 6. Could you read something in which all the words were spelled wrong?
- 7. Could you read something in which all the words were spelled differently?
- 8. How do you read a code?
- 9. Can you figure out a code?
- 10. Can you have a secret code?
- 11. If you're the only one who can ever know your private code could you be sure that you remember it correctly?

MJW

EXERCISE: Causes and purposes

(p. 69, line 22)

When Pixie asks why nothing is simple, her mother replies, "It's to make you think, dear."

Presumably Pixie is looking for an explanation rather than a reason, and it would seem that her mother has instead given her a reason of sorts. Pixie's mother implies, in other words, that complexity has a purpose--the purpose, or a purpose, being to make us reflect.

Perhaps it would be well to consider a number of analogous situations, and to ask if the explanation should be in terms of causes or in terms of purposes.

1. Benjie: "Why are there these lines on the cantaloupe?"

Matilda: "That's to show you where to cut to make equal portions."

2. Nan: "Why do we have noses?" Alex: "To hold our glasses up."

3. Chad: "Why do trees have leaves?" Sidney: "So they can give us shade."

4. Sidney: "Why does Swiss cheese have those big holes in it?"

Velma: "That way there's less cheese per slice and you won't eat

too much."

5. Anthony: "How come the hands of this clock turn?"

Josephine: "After you wind it up, the spring unwinds, and that makes

the gears and the hands turn."

6. Marsha: "How come you're turning down Madison Avenue?"

Bernie: "I have to stop at the shoemaker's."

7. Doris: "How come poor people don't have all the things they need?"

Dolores: "Because it wouldn't be good for them."

Doris: "But it doesn't seem to hurt rich people any."

Dolores: "Yes, but they're not poor."

8. Ella: "How come polar bears have thick coats of fur?"

Ralph: "Because those with thin coats of fur couldn't stand the cold."

ML

EXERCISE: Reasoning with ambiguities

A number of situations are given below. You are asked to decide

- a. which answer makes sense, but would not be funny.
- b. which answer makes sense, but is surprising and funny.
- c. which answer makes little or no sense.

For example, take this situation:

Visitor to school sees a boy standing near the front door, and a dog nearby. The visitor says, "Son, does your dog bite?" The boy says, "No." A moment later, the dog bites the visitor. He turns to the boy and says, "I thought you said your dog doesn't bite!"

The boy might answer:

- (1) "I meant he hadn't bitten anyone until today."
- (2) "You must be mistaken! He couldn't have bitten you."
- (3) "He's not my dog."

Answer that makes sense but is not funny: (1)

Answer that doesn't make sense: (2)

Funniest answer: (3)

A. The conductor on the train sees a passenger with a pipe. The conductor says, "You can't smoke in this car."

Passenger: "I'm not smoking."

Conductor: "But you've got a pipe in your mouth!"

The passenger might answer:

- (1) "That's right. And I've got my socks on, too. But I'm not walking!"
- (2) "My pipe's not lit."
- (3) "It's a smoky train."
- **B.** Teacher: "Now, Mary, let me get this straight. Wendy slapped you, and you slapped her back."

Mary could answer:

- (1) "Yes, I wanted to get even."
- (2) "It wasn't exactly on her back that I slapped her."
- (3) "I just wanted to show her how much I liked her."
- C. Dentist: "Have you ever had Novocaine before?"

Jimmy: "Yes."

Dentist: "And what happened? Any side effects?"

Jimmy could answer:

- (1) "It wasn't my side that hurt; it was my tooth."
- (2) "Only when the Novocaine wore off."
- 3) "Yes, each time they give me Novocaine, a tooth comes out."

EXERCISE: Reasoning problems for analysis

1. Bert: "Isn't that clock slow?"

Stu: "No, it's just that time moves very quickly here in the city."

Is there a difference between the measurement of time and the way the passage of time feels?

2. Boy: "Mister would you have a small map of Texas I could buy?"

Clerk: "Son, there's no such thing as a small map of Texas."

Does the model of something large have to be large itself?

3. Myra: "I got up at dawn to see the sunrise."

Eileen: "You couldn't have picked a better time."

Don't "sunrise" and "dawn" mean the same thing? Is Eileen right?

4. Andy: (at counter) "I'll have a chocolate soda."

Bud: "I'll have the same. Except, make mine a dish of strawberry."

Is Bud consistent or inconsistent?

5. Farm Boy: "We've discovered that our red chickens eat a lot more than

our white ones."

City Boy: "That's odd. How do you explain it?"

Farm Boy: "Oh, it's just that we have a lot more red ones."

Is there a difference between what the chickens eat when they are considered separately, and what they eat when they are considered all together?

6. Pussycat: "What do you get when you add a 0 to a 1?"

Owl: "It stays 1."

Pussycat: "That's funny, I keep getting 10."

What is the ambiguous word?

ML

EXERCISE: Making implicit analogies by means of questions

(p. 69, lines 6-7)

When we answer a question with a question, it is sometimes in order to establish a parallel situation. When we do this, it may be that we *suggest* an analogy, even though it is not spelled out.

For example, here is a famous interchange:

Gladstone: "What good is a dynamo?" Clerk-Maxwell: "What good is a baby?"

Which of the following exchanges would you say suggest analogies?

1. Maude: "How old is Wilma's grandmother?"

Liz: "How old are the pyramids?"

2. Willy: "Are the flowers in that bowl dying?"

Cindy: "Are they living?"

3. Joe: (on his way to school) "Hey, Jeff, where are you going?"

Jess: (on his way to school) "Where are you going?"

4. Maude: "How old are you, Liz?"

Liz: "How old do you think I am?"

5. Frank: "Is Mr. Jones really rich?"

Ted: "Can a millionaire ever be poor?"

6. Vicky: "Mom, would it ever be right for me to lie to you?"

Mother: "How would you like it if I gave you a false answer?"

7. Eb: "So what difference does it make if a bunch of innocent kids

get hurt, so long as we catch the kid who's guilty?"

Flo: "Isn't that something like throwing out the baby with the

bathwater?"

Teacher Self-Evaluation Chapter Eight

- 1. Have children been reading more carefully lately?
- 2. Have children seemed more reflective in the answers they give to each other?
- 3. Have I had one of my students conduct a class session yet? If so, did he or she do as well as me?
- 4. Have children been more careful in their writing this past month?
- 5. Does there seem to be more of a sense of community in the classroom now?
- 6. Have I given my students sufficient practice in reasoning analogically?
- 7. Can my students recognize good and bad analogies?
- 8. Can my students construct their own analogies?
- 9. Can my students differentiate between a metaphor, a simile and an analogy?
- 10. Can they construct their own metaphors and similes?
- 11. Do I need to go back to the REVIEW after Chapter Six to give my students more practice in analogies?
- 12. Do I need to go back to Chapter Six to give my students more practice in constructing metaphors and similes?
- 13. Should I construct some homework assignments that would give the children practice in reasoning analogically?

CLASSRO	CLASSROOM DIALOGUE					
		_				
Date						
Topic						

WHAT THE STUDENTS ACCOMPLISHED DOING THIS CHAPTER

Specific Skills Taught

Specific Skills Reenforced

Specific Skills to Work on in the future

EXERCISES IN THIS CHAPTER THAT WORKED

REASON THEY WORKED

STUDENT EVALUATION

Students who talked to me many times while doing this chapter.

Students who directed remarks to other students many times while doing this chapter.

Students who are regularly giving reasons for their views during discussions.

Students who were very silent during classroom discussions.

Students who are not giving reasons for views they express

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Students who need work on directing their comments to other students	
rather than to me.	
	-
Students who need work on drawing correct inferences in classroom	
discussions.	
Students who might be inhibiting	
others from talking during classroom discussions.	
discussions.	
Students who need teacher encouragement to elaborate on their	
ideas, especially in terms of what follows from what they say.	
Students who need extra help on	skill
one of the thinking skills covered	skill
in this chapter.	skill
	skill
	skill

CHANGES I WOULD MAKE NEXT TIME I DO THIS CHAPTER

CORRELATED EXERCISES I WOULD USE

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OTHER

Chapter Eight

OVERLAPPING THEMES FROM THIS CHAPTER WHICH OCCUR IN OTHER DISCIPLINES I TEACH

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CHAPTER NINE

Episode I

(pp. 71-73)

Causes and symptoms

Miranda and Pixie get sick on the same night. Presumably they both have the same symptoms. Pixie assumes that they have the same illness. There is some speculation in the family as to the cause of the illness: Pixie and Miranda think they got sick from something they ate, while their mother is inclined to attribute the illness to a virus. (No one raises the possibility that one sister might have a virus and the other might be sick from some other cause.)

Very often people confuse symptoms and causes. Encourage the students' efforts to distinguish between symptoms and causes, but recognize that this process is not always easy. For example, children are familiar with fevers. They may argue vehemently as to whether fever is a cause or a symptom. One should not be surprised if the discussion remains inconclusive because it is not at all clear if fevers are symptoms or causes or both. On the other hand, many varieties of symptoms can be clearly distinguished from causes. The progress students make distinguishing between the two will assist them in understanding the more general distinction between descriptions and explanations.

Genus and species

Pixie wonders if she and Miranda had separate headaches or the same headache. If Pixie now understands the genus-species distinction, she might be asking if it is possible to share the same headache (perhaps in the way people in a crowd can share the same panic.) If she still doesn't undertand the genus-species distinction, it could be that she is asking whether people can share the same headache in somewhat the same sense that she thinks cows and horses share the same "mammal."

Irony

Pixie tells us that she's "dying." Is this an exaggeration, or is it a figure of speech? Does Pixie mean for the reader to take her literally? Miranda's comment to Pixie, "Lucky you," is tart and ironical. You might want to ask your students what they think Miranda means.

When Pixie asks why the doctors can't pay a house call, her mother replies, "Very funny." This would also seem to be a case of irony. It is ob-

vious that Pixie's mother actually implies just the opposite of what she actually says.

Interpreting giggling

When Pixie and Miranda arrive at the doctor's office, the nurse tells them to get ready. They're giggling until the doctor walks in, at which point the giggling suddenly ends. Your students may want to discuss why the girls are giggling. Are they having a lot of fun or are they nervous?

Do doctors resort to excuses?

There is then an exchange between Pixie and the doctor. The doctor claims that he won't give her a shot unless he has to. She retorts, "You'll have to." This cynical remark might be Pixie's way of saying, "That's no reason. You'll do it and the give the excuse you had to." However, all might not agree on this interpretation. Perhaps Pixie's fear of needles and the connection in her mind between needles and doctors determined her answer.

Do doctors resort to flattery?

Dr. Richards apparently realizes that in Pixie he has a patient of some complexity, so he resorts to flattery. "Lots of twelve-year-old kids don't behave as well as you." Pixie is not fooled. She's adept at spotting informal fallacies, and she grumbles that he is making fun of her.

DISCUSSION PLAN: Pain

(p. 71, line 11)

- 1. When you ache, do you say, "I have a pain (in my arm, or leg, or whatever)", or do you say, "I am *in pain*"?
- 2. Is it we who are in pain, or is the pain in us?
- 3. Can animals feel pain? How can you tell?
- 4. Can fish feel pain? How can you tell?
- 5. Can grass feel pain? How can you tell?
- 6. Do you think other people feel pain? How can you tell?
- 7. Is it possible to feel pain, even though there's nothing wrong with you?
- 8. Can a thought cause you pain?
- 9. If a thought can be painful, can you make the pain go away just by thinking of it?
- 10. Can there be times when pain is useful?

EXERCISE: Symptoms and causes

(p. 71, lines 11-14)

A *symptom* is a sign of some illness or disease or malfunction of the body. A *cause* is that which produces an effect such as a symptom, or some other result or consequence.

Thus a runny nose is a *symptom* of a cold. But the cause of the cold may have been one's receiving a chill after one was overheated.

In the following cases, which would you classify as symptoms and which as causes?

			Symptoms	Causes	?
1.	Effie: Steffie:	"My toes hurt." "Your shoes are too small."			
2.	Dora: Sarah:	"My teeth are chattering." "It's so cold in this movie house, I can't enjoy the horror film."			
3.	Victim: Drac:	"What ever made you become a vampire, Drac?" "I couldn't help myself. I was born with these long fangs, see"			
4.	Pilot: Jimmy:	"You seem to be trembling a little." "This is my first parachute jump, and I'm afraid."			
5.	Nick: Carla:	"Look at that dog over there; he's foaming at the mouth." "Probably he's been eating toothpaste. Let's go play with him."			
6.	Darlene: Melba:	"If I have an upset stomach on Tuesday, I'm sure to get a fever sore on Wednesday." "Tuesday will do it to you every time."			

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EXERCISE: Silly questions, silly answers

(p. 71, line 12)

Players line up in two rows, facing each other. Each player in the first row thinks up a question and in a whisper, asks it of the person facing him or her. The questioned person, however, does not immediately answer.

Now the questions are asked aloud, but with the questioner at one end demanding an answer of the person diagonally across from him, in the other row. The person who is addressed then responds with the answer he had prepared for the previous question.

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DISCUSSION PLAN: "The same" and "the same kind" (p. 71, lines 13-14)

- 1. Could Pixie and Miranda had had the same virus?
- 2. Could Pixie and Miranda have had the same cold?
- 3. Could Pixie and Miranda have had the same headache?
- 4. If Pixie and Miranda were Siamese twins, could they have had the same cold?
- 5. If Pixie and Miranda were identical twins, could they have had the same cold?
- 6. Could Pixie and Miranda have had the same kind of cold? Could they have had the same kind of headache?
- 7. Could Pixie have one kind of cold, and Miranda have another kind of cold?
- 8. Could Pixie have a cold and Miranda have a headache of the same kind?
- 9. Could Pixie be mistaken about having a cold?
- 10. Could Pixie be mistaken about having a headache?
- 11. Could Pixie be mistaken about the cause of her headache?
- 12. If Pixie and Miranda happened to bang their heads together, is it possible that one could have gotten a headache, but not the other?
- 13. Is it possible that the same cause could produce different effects?
- 14. Is it possible that Pixie and Miranda both got headaches, but due to different causes?
- 15. Can different causes produce the same effect?
- 16. Did Pixie and Miranda both throw up because they were sick, or did Pixie's throwing up cause Miranda to throw up?

EXERCISE: Irony (p. 72, line 6)

I. To employ irony is generally to imply the very opposite of what we actually say. For example, on line 6, Pixie's mother says "Very funny," and yet we understand that her implication is that it's not very funny.

In the following instances, indicate whether you think that the speakers mean just what they say, or the opposite:

		Mean what is said	Mean the opposite	?
1.	Howard (tripping in the cafeteria and scattering food over everyone): "That was very graceful of me."			
2.	Joy (finding her vacation hotel room to be the size of a closet): "Oh, how magnificent!"			
3.	Hank (looking at the Grand Canyon): "Great!"			
4.	Hank (as his favorite team loses): "Oh, great!"			

II. Sometimes we are ironical when we say something about one alternative in order to imply the opposite about another alternative, or about the remaining alternatives Suppose Daisy says, "Of course Bud's smart! Why he even passed one of his courses this year!" We can infer that he failed the rest, and that Daisy thinks Bud isn't smart at all.

Say whether you think the remarks that follow are irony or are not:

		Not		
		Irony	Irony	?
1.	Gretchen: "Of course Fud's handsome! How could anyone not be handsome with such a beautiful tooth?"			
	nanusome with such a beauthur tooth?		Ш	Ш
2.	Guy: "Boy, do I love watermelon! I even prefer it to ice cream!"			
3.	Seth: "I trust that fellow absolutely—as long as I can watch him."			
4.	Minerva: "What a lovely day this has been! It hasn't rained now for			
	five whole minutes!"			

ML

EXERCISE: Irony (p. 72, line 6)

Consider this poem:

Hi! Handsome hunting man, Fire your little gun.
Bang! Now the animal
Is dead and dumb and done.
Nevermore to peep again,
Creep again, leap again,
Eat or drink or sleep again.
Oh, what fun!

-Walter de la Mare

- 1. Does the person who wrote this poem think that killing animals is a good thing?
- 2. Does the writer think killing animals is fun?
- 3. Since the last line of the poem is "What fun!", wouldn't you say that the writer is in favor of hunting as a sport?
- 4. Is it possible that the writer means the opposite of what he has just said?
- 5. What is there in the poem that might suggest that the writer strongly dislikes hunting animals and killing them?
- 6. Does the poem, up until the last line, make you admire the hunter?
- 7. Does the poem up until the last line, make you admire the animal?
- 8. Does the poem make you feel joy in the liveliness of the animal?
- 9. Does the poem make you wonder how helpless and defenseless the animal is?
- 10. Does the poem make you wonder just what fun anyone could get out of killing a helpless creature? Is that the meaning of the words, "What fun..."?

EXERCISE: Ambiguous sentences

(p. 72, line 6)

What do the following sentences mean?

- 1. Mary's mother gave her dog biscuits.
 - (a) Mary's mother gave Mary's dog some biscuits.
 - (b) Mary's mother gave Mary some dog biscuits.
 - (c) Mary's mother gave the dog (which belonged to Mary) some biscuits.
 - (d) Mary's mother gave the dog (which belonged to Mary's mother) some biscuits.
- 2. Mr. Smith loved racing horses.
 - (a) Mr. Smith loved to race horses.
 - (b) Mr. Smith loved racehorses.
- 3. "Tom," said the teacher, "ask Tony who is sitting by the window."
 - (a) "Tom, ask Tony, who is the person sitting by the window."
 - (b) "Tom, ask Tony who is sitting by the window."
- 4. Jenny liked chocolate pudding more than Hank.
 - (a) Jenny liked chocolate pudding more than she liked Hank.
 - (b) Jenny liked chocolate pudding more than Hank liked it.
- 5. Walter wanted more tasty food.
 - (a) Walter wanted food that was more tasty.
 - (b) Walter wanted more of the tasty food.

ML

EXERCISE: Problems of meaning

(p. 72, line 6)

Part I

- 1. Is a swimming pool a pool to swim in or a pool that swims?
- 2. Is a *drinking* fountain a fountain to drink from or a fountain that drinks?
- 3. Is an eating apple an apple that eats or an apple to be eaten?
- 4. Is a *running nose* a nose that drips or a nose that rushes?
- 5. Is a *parking ticket* a ticket for parking or a ticket that parks?
- 6. Is a *criminal lawyer* a lawyer for criminals or a lawyer who is a criminal?
- 7. Is a *walking stick* a type of cane or a stick that walks?
- 8. Is a *flying lesson* a lesson in flying or a lesson that flies?

Part II.

Do you have problems with the meaning of any of the following:

a. singing telegram

b. hanging judge

c. frying pan

d. firing range

e. dying words

f. fighting words

g. living room

h. washing machine

i. school nurse

j. voting machine

k. a paper factory

1. honey bees

ML

EXERCISE: Flattery (p. 73, lines 4-6)

Dr: Richards tells Pixie, "Lots of twelve-year-old kids don't behave as well as you." At this, Pixie grumbles that he's making fun of her. Is he making fun of her, or is he being ironical, or is he simply trying to flatter her in order to get her to behave?

Flattery is praising too much. Praise can be merited, but if we praise people more than they deserve, we are said to flatter them.

Which of the following cases would you say are cases of flattery:

		Flattery	Not Flattery	?
1.	Doug: I'll say this about Alaska: it's the biggest state in the whole United States of America!"			
2.	Lauren: "Suzy, that was brilliant of you to figure out that the word 'spelling' has eight letters! None of the rest of us could have done that!"			
3.	Nina: "Mac, you risked your life to save that kid whose house was on fire. I'd say you're a real hero!"			
4.	Midge: "Madge, don't let it worry you that everyone says you have a squeaky voice. I think it's very musical and very lovely."			

EXERCISE: "Making"

(p. 73, line 6)

Match the words or phrases in the column on the right with the words or phrases involving "making" on the left.

- 1. Neil makes fun of whatever Pixie does.
- 2. Whenever Miranda and Pixie quarrel, they make up afterwards.
- 3. Pixie's mother is making up a shopping list.
- 4. Pixie's mother is making up her face.
- Pixie's father says, "We don't have much money, so we'll just have to make do."
- 6. Every morning Pixie and Miranda make their bed.
- 7. Pixie is making a picture in art class.
- One and one make two.
- 9. Pixie's mother says, "I'll have to make out a check for the rent."
- 10. Pixie says, "It's not easy to make friends."

- a. become friendly again
- b. putting on cosmetics
 - c. ridicules
- d. preparing
- e. straighten up
- f. painting
- g. live economically
- n. egual
- . acquire
- write

DISCUSSION PLAN: Illness

(p. 73, lines 10-20)

ML

- 1. Are all illnesses painful?
- 2. Are all illnesses catching?
- 3. If an illness is painful, does that mean it's not catching?
- 4. If an illness is catching, does that mean it's not painful?
- 5. Can you tell the difference between being sick and being well?
- 6. Can your doctor tell the difference between your being sick and your being well?
- 7. Is it possible that you could think you were sick but your doctor said you were well?
- 8. Is it possible that you could think you were well but your doctor said you were sick?
- 9. If you and your doctor disagree about your health, could you be wrong?
- 10. If you and your doctor disagree about your health, could your doctor be wrong?
- 11. Could two different doctors disagree about your health?
- 12. Could two doctors agree on the symptoms you have, but disagree as to the meaning of the symptoms?

Episode 2

(pp. 73-76)

A little manipulation of a friend

Pixie is worried that she will miss telling her story to the class. Her father tries to help her with her problem by suggesting she invite her classmates to her house and tell them her story there. Pixie asks Isabel to ask the class to assemble in her room. It doesn't occur to Pixie that many of the people in the class will consider the request unreasonable. Nor does it occur to her that she is giving Isabel a very difficult assignment. Isabel, with her usual sagacity, anticipates the likely consequences very clearly, but Pixie will not put up with Isabel's protest. She proceeds to plead and wheedle and manipulate to have her way. First she reminds Isabel of their friendship. Then she dramatizes her condition as much as she can by saying, "Who knows—I may be dying." She woefully predicts how sorry everyone would be if she were not to return to school. Pixie realizes that had Isabel not agreed, all of her arguments could have been combined by asking Isabel "how she could refuse to do a little favor for a dying friend."

Ends and means

There are a number of issues here. When does a request become unreasonable? What is a friend? Is it right ever to manipulate a friend? What is a promise? (Isabel firmly tells Pixie that she's not going to promise anything.) Many of these issues come up because Pixie has a certain goal in mind, and is not too scrupulous as to the means she uses to attain that goal. The whole episode raises questions of the relationship of ends and means. Is it ever right to seek an end regardless of what means one uses or regardless of what consequences or results? Is it ever right to use one's friends for one's own purposes?

Promising

When the children come to her home, Pixie is disappointed that there are only four of them, but she doesn't let herself cry. She tells them her story, and they promise to tell the others. Again the issue of promising comes up.

Pixie then reminds us that she never promised to tell the reader her story. It doesn't seem to occur to Pixie that sometimes you do something whether you have promised or not. On the other hand, we can infer from what she says that if she did promise, she would feel obliged to tell us.

If we look at Isabel's remark on the previous page about promising, it might be helpful. She says, "I'll try. But I'm not going to promise anything." In other words, I'll do everything I can. Pixie evidently believes that only a promise is a commitment to perform a favor for a friend.

At the end of the episode note that her friends don't say to her, "We're going to have a mystery. And when you come back, maybe we'll let you in on it, and maybe we won't." They say, "When you get back to school you're in for a big surprise." Unlike Pixie, they draw the line at unnecessary teasing.

DISCUSSION PLAN: Pretending

(p. 74, lines 17-26)

Pixie suggests that she may be dying, and implies that her friends have no right to refuse her request.

- 1. Does Pixie try to deceive Isabel about just how sick she (Pixie) is?
- 2. Is it ever right to deceive a friend?
- 3. Would we be more accurate if we said that Pixie is trying to pretend that she's very sick?
- 4. Is pretending the same as making believe?
- 5. Is pretending the same as acting?
- 6. Is pretending the same as lying?
- 7. If you're not a king, but you think you are, and you act like one, are you pretending to be a king?
- 8. If you're a king and you know it, but you act like you're not a king, are you pretending?
- 9. Do animals ever pretend (for example, do they ever "play dead"?)
- 10. Suppose you do a lot of pretending. Could you pretend to stop pretending?

EXERCISE: Ends and means

(p. 74, lines 24-26)

Ends are goals or objectives—things we aim at. *Means* are the things or methods we use to achieve our ends.

For example, to get to school, many children take buses. The bus is a *means* of transportation; getting to school is the objective or *end*. Again, children go to school in order to get an education. So getting an education is the *end*, and attending school is the means.

Can you sort out the means and the ends in the following cases? Can something be both a means and an end?

	End	Means	•
 1. 1st mayor: "How can we improve transportation between our two c 2nd mayor: "Build a bridge across the river." 	cities?"		
2. Jerry: "When you play solitaire, do you ever cheat?" Nancy: "Sure! The important thing for me is winning!"			
3. Larry: "What are you going to do with that dime?" Gloria: "I just love bubble gum!"			
4. Edgar: "Why do you work so hard?" Lila: "I want to buy a new house." Edgar: "Why do you want a lot of money?" Lila: "I want to buy a new house."			
 Edgar: "Why do you work so hard?" Bud: "I want to make a lot of money." Edgar: "Why do you want to make a lot of money? To buy a new ho Bud: "No. I'm a miser." 	ouse?" □		
6. Goldie:"Where are you going with that monkey wrench?" Velma: "To fix the plumbing in the basement."			
7. Apprentice bankrobber: "Will this be the perfect crime?" Master bankrobber: "Yes, so let's wear gloves and leave no finger,	orints."		
 Billy: "Tell me a bedtime story and I'll go right to sleep." Babysitter: "Do you really want to go to sleep? Why not stay up we and watch TV?" 	with $_{\square}$		

ML

(p. 75, lines 9-10)

Pixie says she didn't cry, although she wanted to. That seems a bit odd. Usually we can't do things because *other people* don't let us do them. But here's a case of wanting to do something, and still not doing it, even though no one else stops Pixie.

Answer the following, and give reasons where possible:

I. Can people

- 1. cry whenever they want to?
- 2. laugh whenever they want to?
- 3. have headaches whenever they want to?
- 4. breathe whenever they want to?
- 5. sleep whenever they want to?

II. Can people *refuse* to do the following:

- 1. eat
- 2. digest what they've eaten
- 3. live
- 4. die
- 5. hate
- 6. love

EXERCISE: Breaking a promise

(p. 75, line 15)

Suppose Pixie were to say, "I promised Isabel I'd go to the movies with her on Sunday. But on Sunday, for no reason, I broke my promise." Is this case of breaking a promise like any of the following cases:

- 1. Sonny: "My friend Biff asked me whether 15 times 3 equals 45, and I said, 'Well, it does and it doesn't'."
- 2. Jonathan: "Trudy and I went to the movies together. All through the movie, she had her arms around me, and that was funny, because in the movie, these gangsters were living in a house, and they had their arms around them all the time."
- 3. Gordon: "I have lots of doubts about things. If people ask me a question, I'll first answer, `Yes,' and then a moment later I'll say, 'I mean no'."
- 4. Ruth: "Sure I borrowed money from you. But I never promised I'd pay it back, did I?"
- 5. Gloria: "It's true I don't always do what I say I'll do, but I'll say this for myself: I never break a promise!"

ML

EXERCISE: What is a promise?

(p. 75, line 19)

In which of the following cases is the speaker making a promise?

		Promise	Not a Promise	?
1.	Arthur: "Promise me you'll always love me." Guinivere: "I will."			
2.	Ogre: "Will the sun always come up?" Jack: "Yes it will, and that's a promise."			
3.	Bluebeard: "Will you always love me?" Wife: "For as long as I live, and that's a promise."			
4.	Charlotte: "Will you please be quiet?" Stuart Little: "I intend to be as quiet as a mouse."			
5.	Mrs. Woodcutter: "Did you children dust the house theway I told you to do?" Hansel and Gretel: "No, we gave it a lick and a promise."			
6.	Thor: "You promised you'd pay me back the money you borrowed, and a promise is a promise." Loki: "I never promised. I predicted I'd pay you back,and I was wrong."			
7.	Ali Baba: "Will you take me with you on your next voyage?" Sinbad: "If you behave yourself."			
8.	Suitor: "When will you tell me whether you'll marry me?" Atalanta: "Tomorrow."			
9.	Dancer: "Promise me anything, but give me a bottle of expensive perfume." Tin Soldier: "Here's the perfume; I promise that tomorrow I'll bring you the moon."			
10.	Aladdin: "How would you like it if I married your daughter?" Sultan: "Is that a threat or a promise?"			

EXERCISE: Reasoning problems for analysis

1. Johnny: (riding on bus) "Please mister, can you see what time it says on

the clock over there?"

Man: "It says nine-thirty."

Johnny: (a few minutes later) "Mister, what does that clock over there say?"

Man: "Nine-fifteen."

Johnny: "Hey, driver, let me off this bus! I'm going in the wrong

direction!"

Is it possible that the second clock showed an earlier time than the first clock? Is it possible that Johnny got space and time confused when he thought he was going in the wrong direction?

2. Martian (upon seeing a piano for the first time): "Wipe that grin off your face!"

Would you say the Martian is thinking analogically, but not very well?

3. Sid: "Lady, give us a quarter and my little brother will imitate a

bird for you."

Lady: "Really? Will he whistle like a bird?"

Sid: "No, but he'll eat a worm."

Is there more than one way in which one can imitate a bird? Is one way the usual way?

4. George: "Doctor, I'm sure I have crudosis and that's always fatal."

Doctor: "Nonsense! If you had it, you'd never know it. There

wouldn't be the slightest discomfort."

George: "But doctor, those are exactly my symptoms!"

Can the lack of pain be a symptom of a disease? Are there other symptoms the doctor may know but which George doesn't know?

5. Ginny: "I don't know where my glasses are."

Liz: "I'm sure you'll find them."

Ginny: "Oh, sure, and once I do, I'll be able to look for them much

better."

Could this be a confusion of cause and effect? Can the effect (such as finding) ever come before the cuase (such as searching)? ML

Teacher Self-Evaluation Chapter Nine

- 1. Do I turn to students for help more these days?
- 2. Do I perceive my students as much brighter than I did four months ago?
- 3. Do I find that my students' ideas challenge me to think about things I've never thought about before?
- 4. Did I learn anything from my students' discussion of what's involved in Breaking a Promise?
- 5. Are my students expressing their ideas in other modes now: art, dance, drama, singing?
- 6. Are students more apt to help each other formulate their ideas more clearly?
- 7. Are students more considerate of each other?
- 8. Do my students think of me as someone who is also inquiring about many things every day?
- 9. Do my students tolerate diversity of views on topics?
- 10. Do my students manifest a respect for a method of inquiry?

CLASSKOOM	DIALOGUE

Date	
Topic	

WHAT THE STUDENTS ACCOMPLISHED DOING THIS CHAPTER

EXERCISES IN THIS CHAPTER THAT WORKED

Specific Skills Taught	REASON THEY WORKED
Specific Skills Reenforced	
Specific Skills to Work on in the future	

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CHANGES I WOULD MAKE NEXT TIME I DO THIS CHAPTER OTHER SOURCES THAT RELATE TO THEMES IN THIS CHAPTER **CORRELATED EXERCISES CHILDREN'S LITERATURE** I WOULD USE Stories Play **MOVIES** ART WORKS AND PROJECTS MUSICAL COMPOSITIONS AND PROJECTS **DANCE EXERCISES OTHER**

OVERLAPPING THEMES FROM THIS CHAPTER WHICH OCCUR IN OTHER DISCIPLINES I TEACH

CHAPTER TEN

Episode I

(p. 77-81)

Creating and performing

Pixie tells her story to four people. When she gets back to school, she finds that her story has been told to others and that she is going to hear the final versions from the last four people who heard it. One point is immediately evident: none of those individuals who will now tell stories made up those stories. So there is a distinction between people like Pixie who make stories up and tell them and "story-tellers." Your students may be aware that similar distinctions prevail among adults in the world of art. Some individuals create works which they themselves perform, while others are performers of works created by others. For example, many singers today write and perform their own music. Some playwrites create works for the theater and then act in them themselves. Some poets will publicly read their own works. But more commonly, there are the so-called creative artists who do not perform, and the performing artists who do not write what the perform.

Versions:

The split between the creator and the performer has made possible a much greater variation in styles of performances. There may be only one play called *Hamlet*, but there have been hundreds of different interpretations of it. The same is true for Pixie's story. Had she told her story to the class herself, there would have been only one version of it. Now there are many competing versions, and the possible relationships that they have to one another and to the original are fascinating.

Performance as dialogue

Pixie's classmates arrange the telling dialogically. They could have had a narrator but they choose instead to have a helper who asks questions. One sees here that the methodology which Mr. Mulligan has used throughout the semester, in discussing whatever ideas are brought before the class, is now internalized by the children themselves and incorporated into their own approach.

Unifying the dramatizations

They also want a musical setting and a dramatization. Presumably, Pixie did not dramatize her story when she told it at her home, but her classmates decide that the stories should be dramatized. What's more, they recognize that there has to be a unifying thread which is more than the fact that there are four versions of the same original story. They provide for a single director who in turn oversees the four dramatizations. When Pixie hears this, she claps her hands and says that it will be like a play in four acts.

A reversal of perspective

It may be noted that the class is on stage: Only Pixie and Mr. Mulligan are in the audience. This provides for an interesting reversal of perspective.

Is Pixie honest with herself?

Note too that Pixie talks to herself at one point. You might ask your students if Pixie is more honest when she talks to herself or when she talks to others.

Puppets

Isabel also tells Pixie that it is going to be a puppet play. You could raise such questions as: Are puppets models of people in real life? Are actors on a stage analogies of people in real life?

Is there a preferred approach to these stories?

The children present their four versions of Pixie's story in dramatic form, and this is how their versions should be treated in you classroom. Some readers will be tempted to interpret these four versions of Pixie's story as though they were creation myths. In this regard, it would be well to remember that Pixie herself, on page 27, has provided two very important clues for the understanding of these stories. She has told us that the story "made me wonder about the difference between animals that think and animals that don't. And it made me wonder how thinking starts, or where it comes from." Moreover, to interpret these stories as creation myths would seem to be out of keeping with the themes that run through the whole of Pixie and not just with the clues which she has expressly provided. Pixie dwells consistently on such things as what are minds, what are persons, what are relationships, and what are analogies. The problem of the creation of the world is seldom in the forefront of any of the discussions. This is not

to say that it would be illegitimate to see these stories as analogous to creation myths. But from a pedagogical point of view, it would be wise to avoid bringing these stories into contest with existing accounts. At the same time, these stories present an opportunity for children to discuss some important philosophical themes: mind, identity, and relationships.

Planning the production

It would be useful for you to give your students actual assignments well in advance and encourage them to devise props, gestures, scenery, music, lighting, staging—anything that would be conducive to improving the dramatic effect and plausibility of their presentations.

The students in your class could either act the parts out themselves, or they could make puppets and do puppet shows. They could make a stage for the puppets and assign talking parts. Perhaps the children who are assigned the parts of Jocko and Bozo could do some research before their presentations and enlist the help of some of their classmates in making a model of a milk separator. During the presentation they could present the model and explain how it works to the entire class.

After the four presentations you could stay in the background. One or two students could be selected as student teachers for each of the stories, and they could direct the discussion after each act. Each student teacher could have a helper who could suggest additional questions to the group and keep the discussion going. The following ideas or themes could be incorporated into questions by the student teachers and their helpers:

Themes to Consider for Act I: Jocko and Bozo's Story

- 1. What's the meaning of the phrase "Once upon a time"? Does this phrase a way to indicate to the audience that this is going to be a "make-believe" story? Have you ever heard a true story begin "once upon a time"?
- 2. How is a cyclone like a hurricane? How is it not like a hurricane?
- 3. How is the movie version of The Wizard of Oz like the book version, and how is it not like the book version?
- 4. In what way was Judy Garland like Dorothy, and in what ways was she different?
- 5. When you watch the movie version of The Wizard of Oz, do you make believe it's true?
- 6. Did Judy Garland have to make believe she was Dorothy in order to act the part?
- 7. Do animals ever make believe that they are something they are not?
- 8. If a thing is part of the scenery of a play, is it acting a role?
- 9. In what way was the milk separator used as an analogy?
- 10. Can anyone imagine what it would be like if minds and bodies were separated from one another?
- 11. Can anyone imagine what a mind would be like even if it weren't separated from a body?
- 12. Are minds imaginable?
- 13. Could bodies look for minds if they didn't have minds to help them look?
- 14. Could minds look for bodies if they didn't have bodies to look with?
- 15. Are you sure that the mind you have is really yours?
- 16. How could you tell if it weren't?
- 17. Does the last question remind you of what happened to Pixie in the very beginning of the book when she wondered about her mind belonging to her body?
- 18. Does being reminded mean being equipped with a new mind?
- 19. Is Jocko likely to find his mind under his bed or in the bathtub?
- 20. If it were in the bathtub what would it be doing there? Taking a bath?
- 21. Is there a more likely place in which to find a mind?
- 22. Is it possible that his mind isn't in any particular place?
- 23. Is Bozo right that the Missing Persons Bureau looks only for persons and not for bodies and minds?
- 24. What's a person?

EXERCISE: Flashlight

(p. 77, lines 8-9)

Each player needs: a piece of paper, a pen or pencil, and a tablet or

something to write on.

Group needs: a flashlight, a dark room where players can sit in a circle

on the floor.

Sit around in a circle. Put the flashlight in the center of the circle.

Each player should try to form, in his or her mind, a one sentence autobiography. ("What! The story of my whole life, all in one sentence?" "Yes, the story of your life, summed up in a single sentence.")

When you are ready to write, call out "Flashlight!" You then have the next turn at using the flashlight. Your neighbor can hold it while you write your sentence. Afterwards, collect the sentences, and write them as a group poem. It will be a summary of the life of the class.

ML

EXERCISE: Egg stories

(p. 77, lines 8-9)

- 1. Each member of the class should bring a hard-boiled egg to class. (Alternatively, some members of the class might want to bring in enough eggs for everyone.)
- 2. Spend a few minutes drawing on your egg. (You might want to draw just a face. Or, you might want to put a belt around the egg's middle, and draw an entire person.)
- 3. Now, each person should whisper a story to his or her egg. (The story might very well be the story of the egg's future.)
- 4. Next, take the part of the egg, and tell yourself the egg's story, as you think the egg would like to tell it.
- 5. What will you do now? Eat the egg? Give it to a friend? Or bring it back home?

ML

EXERCISE: Writing assignment for homework

(p. 77, lines 8-9)

Each member of the class is to take a different group of words, and put them together so as to form a little story. Where are each person's words to come from? From each other member of the class.

The simplest way to do this would be for each member of the class to take as many bits of paper as there are other members of the class. On each bit of paper, write a single word. Now, give out the bits of paper to the other members of the class.

ML

EXERCISE: Criticizing analogies and similes

(p. 78, line 11)

Some similes and analogies work better than others. The ones that work seem more appropriate, more fitting, than the ones that don't work. Look over the following, and say which you think don't work, and why.

Part I. SIMILES

- 1. A puppet is like a person.
- 2. A person is like a puppet.
- 3. A water storage tank is like a drum.
- 4. A drum is like a water storage tank.
- 5. A harmonica is like an organ.

Part II. ANALOGIES

- 1. A writer is to the characters in his story as a puppeteer is to his puppets.
- 2. Playing a harmonica is like playing an .organ.
- 3. Telling a story is like writing a story.
- 4. Just as an act is part of a play, so a stage is part of an auditorium.
- 5. Just as a stage is part of an auditorium, so an act is part of a play.
- 6. A hand is to a drum as a mouth is to a harmonica.
- 7. A writer is to a storyteller as a storyteller is to an actor.

ML

EXERCISE: Story topics

(p. 79, line 5)

As you know, many works of art-stories, poems, plays, and so on—have titles like *The Yellow Submarine*, *The Little Prince*, *The Sunken Cathedral*, *The Lost Continent*, in which there is a noun and a modifier. The noun tells you the thing the story is about; the modifier tells you what sort of thing it is. Together they announce the topic.

The two following columns contain modifiers and nouns. Choose two which you think would make a good topic (and title) for a story. Start, of course, with

"The"

creaky bathtub dizzy swamp smiling spoon rapid meatloaf gloomy ogre lively attic electric pickle frightened daughter runcible witch falling ladybug blazing banana chemical skateboard steeple sour happy flowerpot cash register dogeared honest nightmare divisible sailboat shattered bowler steadfast crumb proud pudding cowardly bathing suit watery spectacles deadly took serene touch nasty taste soluble bellybutton

Now, how about writing a brief story, using the topic you have chosen?

(p. 79, line 10)

- 1. Are there some people who aren't clowns, but who act like clowns?
- 2. What does it mean to say that someone "clowns around"? Do clowns "clown around"?
- 3. What does it mean to say, "He's nothing but a clown"? Are clowns unimportant?
- 4. Do clowns make people laugh and have fun?
- 5. Do clowns laugh and have fun?
- 6. Is it possible to have fun without laughing?
- 7. Is it possible to laugh without having fun?
- 8. When clowns make us laugh, does that mean *they* 're happy?
- 9. When clowns paint their faces so that they look sad, does that mean that they're really happy?
- 10. If you think clowns are full of mischief, is it real mischief or makebelieve mischief?

ML

EXERCISE: Versions

(p. 80, line 4)

L. Frank Baum wrote the book, *The Wizard of Oz*. Then there was a movie version of the book. Then there was a musical comedy version of the movie.

Pixie made up a story. Then the members of her class acted out four different versions of her story.

Couldn't they then do a musical verison of the plays they put on? And couldn't someone take one of their songs, and make an orchestra piece out of it? And couldn't someone write a poem about the orchestra music? And couldn't someone set the poem to music? And couldn't someone set the music to a ballet?

In this exercise, decide who is to begin by finding out everyone's birthday. The person with the birthday closest to December 31st begins.

Now that person tells what he or she created.

The next person tells how he or she took what the first person created, and made a version of it in a different art form.

The third person does the same to the second person's version, and so on through the class.

DISCUSSION PLAN: Analyzing an analogy

(p. 80, lines 8-19)

Bozo and Jocko think of the minds being separated from the bodies by the hurricane the way the cream is separated from the milk by the separator on the dairy farm. Let's consider this analogy.

- 1. Is the milk heavier than the cream, or the cream heavier than the milk?
- 2. Is the mind lighter than the body?
- 3. Since the cream rises to the top, does it follow that the mind must rise "to the top"?
- 4. Does the mind have any weight?
- 5. Is the mind "inside" the body?
- 6. Is it possible that the body is "inside" the mind?
- 7. Is your body in space?
- 8. Is your body in time?
- 9. Could your body be in your mind the way your body is in space and time?
- 10. Is Bozo's analogy a good one or a poor one? Why?

ML

DISCUSSION PLAN: Minds and bodies

(p. 80, lines 20-24)

Suppose there was a hurricane, and everyone's bodies and minds were separated. After the hurricane the bodies and minds went about looking for one another:

- 1. Would thin bodies find thin minds and would fat bodies find fat minds? Why or why not?
- 2. Would the eyes of the body see its mind and would the mind *think* that this must be my body? Why or why not?
- 3. If the wrong mind got with the wrong body, can you think of ways each would know it?

PG

DISCUSSION PLAN: Minds and bodies

(p. 80, lines 20-24)

- 1. Can you see your entire body, or just part of it?
- 2. Can you see your back (without looking in a mirror)?
- 3. Can your eyes see themselves?
- 4. Why is it that the eye can see almost everything—except itself?
- 5. Can your mind know just about everything?
- 6. Can your mind know itself?
- 7. Is there an analogy between the eye trying to see itself and the mind trying to know itself?
- 8. Is what you call your mind a series of sounds that you "hear," but not with your ears, and images that you "see," but not with your eyes?
- 9. Is it true that sometimes the sounds and images "in your mind" are like things in the world, and at other times there's no resemblance?
- 10. Suppose a movie theater could speak, and it told you it had a *mind*, because it contained *sounds* and *images*. Would you agree with it or disagree? Why?

EXERCISE: Minds (p. 81, line 10)

The right-hand column consists of a number of different views of what the mind is. The left-hand column contains a number of expressions regarding the mind. Can you match the items on the left with those on the right?

- 1. Daisy: "I act with my body. I think with my mind."
- 2. Brad: "Mind is matter. It's the stuff in your head that makes you think." $^{\rm C}$.
- Tess: "Mind is just a word for talking to oneself."
- 4. Rich: "My mind is my personality."
- Gil: "You can't see or touch the mind. Matter can be created and destroyed, but not mind."
- Leila: "The word 'mammal' is the name for a class of creatures. The word 'mind' is the name for a class of thoughts."
- Stan: "A paragraph is an arrangement of words, and likewise, a mind is an arrange-ment of ideas."

- a. The mind is simply the brain.
- b. The mind is an invisible stuff.
- The mind is a dimension in which thoughts occur, just as space and time are dimensions in which events occur.
- d. The mind is the class of a person's mental acts, such as believing, denying, etc.
- e. The mind is the class of a person's ideas.
- f. There is no such thing as mind.
- g. None of the above.

ML

DISCUSSION PLAN: Minds and bodies

(p. 81, lines 16-19)

Part A.

- 1. Would you be able to walk if you didn't have a body? What if you had a body, but didn't have a mind?
- 2. Would you be able to talk if you didn't have a body? If you didn't have a mind?
- 3. Would you be able to feel the cold in the winter if you didn't have a body? What if you had a body, but not a mind?
- 4. Would you be able to count if you didn't have a body? What if you had a body, but not a mind?
- 5. Would you be able to read to yourself if you didn't have a body? What if you had a body, but not a mind?
- 6. Would you be able to let other people know you were there if you didn't have a body? What if you had a body, but not a mind?
- 7. Would you know that another person was present if you didn't have a body? What if you had a body, but not a mind?
- 8. Would you be able to think if you didn't have a body? What if you had a body but no mind?

Part B.

- 1. How would you feel if you woke up one morning and found that you had the body of a bear? What sorts of things could you do that you hadn't done before? What. sorts of things couldn't you do? Do you think you would do things differently from other bears?
- 2. How would you feel if you woke up one.morning and couldn't remember anything about yourself? What things could you do? What couldn't you do?

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DISCUSSION PLAN: Persons

(p. 81, lines 20-22)

- 1. Are all your friends persons?
- 2. Are all the people in your family persons?
- 3. Are any of the things in your house persons?
- 4. Are animals persons?
- 5. Are fish persons?
- 6. Are insects persons?
- 7. Are children persons?
- 8. Are there any grownups who are not persons?
- 9. Does someone who dies continue to be a person after death?
- 10. Is every person different?
- 11. Could two persons share the same body?
- 12. Could one person have two bodies?
- 13. Could one person have two lives?
- 14. Must persons have bodies?
- 15. Must persons have minds?
- 16. Must persons have both bodies and minds?
- 17. If a chicken heart in a butcher shop began to behave intelligently, would it be a person?
- 18. Does someone paralyzed or in a coma cease being a person?
- 19. Are characters in fiction (like Pixie and Brian) persons?
- 20. What is a person?

ML

DISCUSSION PLAN: The two clowns

(p. 81)

- 1. Why was Jocko so excited at the beginning of the story? Would he have been just as excited if Bozo had not begun with the words "Once upon a time"?
- 2. Bozo is telling a story about a hurricane. So why does he suddenly start talking about milk in a tub? Is he making an analogy? Explain.
- 3. Jocko says he can't imagine what it would be like if people's minds were separated from their bodies. Why does he find this difficult? Can you imagine it?
- 4. In Bozo's story, the bodies went around looking for their minds, and the minds looked for their bodies. When you look for something, is it your mind or your body that does the looking? or both? or neither?
- 5. Sometimes a mistake was made: a body joined up with the wrong mind, and they quarrelled and fought. Can you think of an analogy for this?
- 6. Can people lose their minds? How? Can they lose their bodies?
- 7. Are only people persons, or is anything with a mind a person?
- 8. Do persons have minds and bodies, or do minds and bodies have persons? If one, why not the other?
- 9. If a person lost its mind and its body, what would be left? Nothing? But how could nothing have a mind or a body?

MJW

Themes to Consider for Act II: The Lady and the Magician

- 1. What is a magician?
- 2. Could there be raindrops if there were no world?
- 3. Could there be candies without a candy factory?
- 4. Is the magician being ironical when he says "how sweet"?
- 5. What does the phrase, "just about every kind you could imagine and then some," mean?
- 6. If there were no world, and the candies kept falling, would they fall forever?
- 7. Why did the candies slow down?
- 8. What's an explanation?
- 9. The magician says the candies were red, purple, green, and gold and that is why the world is these colors. Must that be so?
- 10. Could the candies be of one set of colors and the world they form be of a different set of colors?
- 11. Can you imagine feet, legs, ears, noses, and fingers wandering around?
- 12. Why were they trying to find one another?
- 13. Does this suggest that at some previous time they knew one another or were united with one another?
- 14. How can something be hard to believe?
- 15. Why would some things be harder to believe than other things?
- 16. The lady says, "I didn't ask you to believe. All I asked you to do was listen." What is the difference between (1) listening to a story where you believe what's being told to you (2) listening where you disbelieve and (3) listening while neither believing nor disbelieving?
- 17. Can the story be just as good in all three cases?
- 18. The parts seem to know what they are doing: The fingers are not looking for feet. How would they know?
- 19. Why weren't the people happy when they got themselves together?
- 20. Which do you think came first: individual persons or families?
- 21. Why do you think people thought to call mountains "mountains"? Could they have called a mountain a "plain," and a plain, "mountain"? Would it have been just as good?
- 22. Could arms, ears, and noses be unhappy?
- 23. Could you be a happy person with an unhappy nose?
- 24. Could you be an unhappy person with happy arms?
- 25. Aren't clowns unhappy bodies with happy faces?
- 26. Could you have an unhappy tree like a weeping willow?

- 27. Is it possible that certain words might think they were made for each other, the way friends sometimes think they are made for each other?
- 28. Is that why when you're talking, the words seem to come out without your having to search for them?
- 29. When you say the word "dog," does the word "bark" immediately get ready to be said?
- 30. Do you think people started to talk because the words were seeking to express themselves?
- 31. Do you think that thinking began only after people had been talking for a time?
- 32. Was the talking that preceded the thinking nonsense talk?
- 33. Don't babies babble before they talk sense?
- 34. Does the lady resemble Sheherzade?
- 35. Was the lady really sawed in half, or was it just an illusion?
- 36. What's an illusion?

DISCUSSION PLAN: What is a magician?

(p. 82, line 5)

- 1. Do magicians perform magic?
- 2. Do magicians *pretend* to perform magic?
- 3. Is a magician simply a master of make-believe?
- 4. Is there really such a thing as magic?
- 5. Do magicians make things happen as if by magic?
- 6. When we say that something happens as if it were something else, is that an analogy?
- 7. Do we call things magic because we have no explanation for such things?
- 8. If a strange creature were to be found living at the bottom of a lake, and we had no explanation for its being there, would you say it got there by magic?
- 9. If someone asked you to pick a card from a deck of cards, and then told you which one you picked, would you call that magic?
- 10. If a magician doesn't really do what he claims he does, is he lying?
- 11. Is a magician like an actor who takes a part, even though he may not personally believe in any of the things he says?
- 12. What's the difference between a clown and a magician?

DISCUSSION PLAN: Shapes and sizes

(p. 83, lines 5-6)

- 1. Could things be of the same size but different shapes?
- 2. Could things be of the same shape but different sizes?
- 3. If things were the same size, but of different shapes, could they be models of one another?
- 4. If things were of the same shape, but of different sizes, could one be a model of the other?
- 5. If things were of the same shape, but of different sizes, could they be analogies of one another?

ML

DISCUSSION PLAN: Names

(p. 84, lines 23-25)

- 1. Is it possible that all names were invented by human beings?
- 2. Is it possible that all language was invented by human beings?
- 3. If people invented language, would that mean that people who didn't have language were able to invent it?
- 4. How does anyone name something?
- 5. What is the relationship between names and the things they name?
- 6. Is there a reason that things have the names they do—is there a reason stones are called "stones' and trees are called "trees"?
- 7. Why do certain people (like John and Mary) have the names they do (like "John" and "Mary")?
- 8. Is there something about your name that makes you think it's just right for you?
- 9. Would it matter to you if you changed your name?
- 10. Can a pretty thing have an ugly name, and an ugly thing have a pretty name?

ML.

DISCUSSION PLAN: Names

(p. 84, lines 23-25)

- 1. Would it make a difference if mountains were called "chairs," as in the Rocky Chairs?
- 2. Would it make a difference if dogs were called "cats," as in "Fido was a good cat."?
- 3. Would it make a difference if teachers were called "students" and students "teachers."
- 4. Would it matter if children were called "adults" and adults "children"?

GE

DISCUSSION PLAN: Words and thoughts

(p. 85, lines 3-16)

The Lady told the Magician that words came first, then sentences, and finally thinking.

- 1. Can you think of something for which there is no word? What is it?
- 2. Can you make up a word? What is it?
- 3. Use your word in a sentence. Does the sentence make sense?
- 4. Could anyone read your sentence and know what it means?
- 5. Which came first, the thought or the word?
- 6. Do we make up thoughts?
- 7. Do we make up words?

PG/AMS

DISCUSSION PLAN: The Lady and the Magician

(p. 85)

- 1. Why does the Lady want to tell the Magician a story?
- 2. In the Lady's story, before there was even a world, there was just a steady rain. What do you think she meant by "world"?
- 3. Can there be rain that doesn't fall?
- 4. We were told that the candies were all different sizes and different shapes too. Could they be different shapes without being different sizes?
- 5. One day not long after the beginning of the world, the gnomes discovered that the earth was made of a huge mass of candies, all stuck together. "Aha!" said the gnomes, "now we know for certain that the world was made by a Witch, for how else could all these candies have got stuck together?" What do you think of the gnomes' reasoning?
- 6. The Magician realized that the different colors in the candy explained why there were different colors in the world. Does that mean that the different colors in the world explained why there were different colors in the candy?
- 7. The Magician found it hard to believe that the arms and legs wandered alone. Do you think he could have believed it if he had tried hard enough?
- 8. Can you think of something that is hard not to believe?
- 9. Is it better to believe things, or not to believe them?
- 10. After words had been invented, names were being given to things, and an argument developed:

Jill: Here's a thing. What name shall we give it?

Jack: Let's call it 'mountain.'

Jill: All right, but what name shall we give to the mountain?

Jack: Oh, what about 'Everest'?

Jill: That's the tops! And now what shall we call Everest?

Jack: Don't be silly, Everest doesn't need a name.

Jill: Then why did the mountain need a name?

How would you answer Jill's last question? Why didn't they just call the thing "Thing"? Why didn't Everest need a name?

11. Isabel: My grandmother always says "think before you speak."

Pixie: Then why did the people begin thinking only after they had been talking for a long time?

Which do you think came first, talking or thinking?

MIW

Questions to be considered in Act III: The Tin Woodman and the Scarecrow

- 1. What does it mean to be scattered?
- 2. Is your body scattered?
- 3. Is your mind scattered?
- 4. How can a mind be scattered?
- 5. If you are wise, does it mean that you are smart?
- 6. If you are wise, does it mean that you are educated?
- 7. If you are wise, does it mean that you are trained?
- 8. If you are wise, does it mean that you are happy?
- 9. If you are wise, does it mean that you are good?
- 10. If all the parts of the Woodman were replaced at the same time, would he be the same Woodman?
- 11. If all the parts of the Woodman were replaced one after another, would he be the same Woodman?
- 12. The Tin Woodman asks a question, "if I replace all my parts again, will I still be me?" The Scarecrow says, "I'll tell you a story." What kind of story are we to expect under these circumstances?
- 13. Would you expect a parable? (A parable is the development of an analogy into a story. It has an educational purpose.)
- 14. What's the difference between a fairytale and a parable?
- 15. Does the scarecrow get an answer? What is it?
- 16. Who asked the parts the questions on the top of page 87? Could they have asked one another?
- 17. Why do the parts argue?
- 18. What is a function?
- 19. Who gave the jobs out "over again"?
- 20. Do parts have only one function?
- 21. Do people in society have only one function?
- 22. How do we come to know what our function is?
- 23. Why were the parts unhappy when they finally got their jobs?
- 24. Are people foolish when they want to be something they are not?
- 25. Does the scarecrow necessarily think they were foolish?
- 26. Will the Tin Woodman ever change? If so, why? If not, why not?

DISCUSSION PLAN: Replacing parts and changing things

(p. 86, lines 14-15)

Tin Woodman to the Scarecrow: "If I replace all my parts, will I still be me?"

- 1. If your parents have an old car and they replace its engine, is it still the same car?
- 2. If your parents have an old car and they replace all the defective parts, one by one, until all the old parts have been replaced by new parts, then is it still the same car?
- 3. If a person's heart is replaced, is it the same person?
- 4. If a person's heart, liver and right leg are replaced, is it the same person?
- 5. If all the parts of a person's body are replaced, is it the same person?
- 6. If Pixie likes pizza and Brian doesn't, does that mean that, if all of Brian's parts were replaced with Pixie's parts, Brian would then like pizza?

PG

DISCUSSION PLAN: Organization of parts

(p. 87, lines 8-21)

- 1. What would it be like if birds had fins and fish had wings?
- 2. What would it be like if your eyes were on the ends of your thumbs? What would be the advantages and disadvantages?
- 3. What would it be like if your ears were on your feet?
- 4. What would it be like if all people had three eyes instead of two? Three arms instead of two?
- 5. What would it be like if there were no families?

GE

DISCUSSION PLAN: The functions of things

(p. 88, lines 1-3)

- 1. Can you run on your hands as well as you can run on your feet? Why or why not?
- 2. Can you pick things up with your feet as easily as you can with your hands? Why or why not?
- 3. Can you cut a lawn with a pair of scissors as easily as with a lawnmower? Why or why not?
- 4. Is there anything you can do as well as anyone else in the class?
- 5. Is there anything someone in the class can do better than you can?
- 6. If the whole class works together can you get things done faster and better than if each of you works alone?

GE

DISCUSSION PLAN: Conditions for perception

(p. 88, lines 6-9)

- 1. Can you see if it's completely dark? Why or why not?
- 2. Can you hear as well when your ears are stuffed with cotton? Why not?
- 3. Can you feel things as well with your fingers when you're wearing gloves?
- 4. Can you smell and taste things as well when you have a cold?
- 5. Does the last spoonful of ice cream taste as good as the first? Why or why not?

GE

PARABLE FOR DISCUSSION: The man who wanted to be a tree (p. 88, lines 11-12)

Mr. Oliver Maple was a mailman. He lived at 721/2 Washington Street, in a medium-sized town. Every day he would walk through the town, delivering the mail. It was hot, tiring work. His feet hurt. He came home and sat out in his back yard for a while. Then he dug a hole about a foot deep and stood in it. He called his wife, and she put some dirt around his feet (he had removed his shoes and socks). She also brought the garden hose and gave him some water around his knees. The neighbors stared at him over the fence. Reporters came, but Mrs. Maple chased them away. The next morning, when Mrs. Maple awoke and looked out her window, she saw a beautiful tree which had not been there the day before. And as she stared at it, it shook its leaves like so many little bells.

Have your teacher read you two stories from Greek mythology, the story of Philemon and Baucis and the story of Daphne, before you discuss the story of Mr. Maple.

- 1. Do you think there are people who, as the Scarecrow claims, want to be cats?
- 2. Do you think there are cats who want to be people?
- 3. Do you think there are children who want to be grown-ups?
- 4. Do you think there are grown-ups who want to be children?
- 5. Would anyone ever want to be a tree?
- 6. Would anyone ever want to be the moon?
- 7. Would a person want to be a summer day?
- 8. Is there anything wrong with wanting to be something you're not?
- 9. Just because you aren't something, does that mean you can't be?
- 10. Do you think the Tin Woodman would rather have been a real woodman, or a story woodman who would never change?

ML

DISCUSSION PLAN: The Scarecrow and the Tin Woodman

(p. 88)

- 1. The Tin Woodman wondered whether he would still be himself if he replaced all his parts. What would you have told him? Would it make any difference if he replaced all the parts but one?
- 2. The Scarecrow said that before there were people there were only parts. Do parts always have to come first? Can you think of any exceptions?
- 3. What is an assembly-line? Can you think of any other way for parts to come together?
- 4. Why do you think the ears and the noses wanted to see?
- 5. You are just going to eat your supper when all the lights go out and there is complete darkness. Can you still taste the food? Does it taste the same as it would if the lights were on?
- 6. Someone hands you a tiny flower and asks you whether you like the delicate scent. At that moment, twenty-eight road drills all start up together just across the street. Can you still smell the flower? Does it smell the same?
- 7. Eventually the eyes were told that their only job was to see, and the ears that their only job was to hear. Is it better to have only one job for your whole life?
- 8. Have you ever wanted to be something you are not? If you could, would you be happy? Suppose you could keep on changing. Would that be best of all?Would you still be the same person? How would you know you were?
- 9. How long do stories last? Can they last forever? If they change, are they still the same story?

MJW

EXERCISE: Understanding a fable

A man went on a hunting trip with two of his scouts. The scouts went out ahead and found a group of elephants. Each scout counted eleven elephants. They came back and told the man how many elephants they had seen. One scout said, "The first elephant was a very large male." The other scout said, "No, the first elephant was a very small female." The man said, "One of you must be wrong." "No," said one of the scouts, "we could both be right."

1st Question: How could both of the scouts have been right?

2nd Question: Once you have figured out how both scouts could have

been right, what is it you have learned?

ML

EXERCISE: A parable for reading

A traveler was crossing a mountain. The path was very narrow. A wall of rock rose on his left. To his right, the side of the mountain dropped off sharply onto a mass of rocks far, far below.

Suddenly, the man stumbled, and in an instant, he found himself sliding down the face of the cliff. He reached out blindly. His hand found a vine, and he clung to it. But now he saw that two mice were gnawing at the vine! Soon they would gnaw

through it! Then he found three ripe strawberries in a small crack in the cliff. He ate them slowly, and with great delight. How sweet they tasted!

The following statements deal with the story you just read. You may think they are right, probably right, wrong, probably wrong, or "can't tell." Which would you say in each case?

			Probably		Probably	Can't
		Right	Right	Wrong	Wrong	Tell
1.	The man came from a big city.					
2.	He was looking for his children.					
3.	The path was very steep.					
4.	It was night.					
5.	He was alone.					
6.	The mice put the strawberries there.					
7.	The mice had already eaten some of the strawberries.					
8.	The strawberries are the last things the man will eat.					
9.	The strawberries taste better than ripe strawberries usually do.					

EXERCISE: A parable for reading

A man looked around him. He saw peace and war, sickness and health, suffering and happiness, life and death.

The man threw his arms out and said, "Universe, I accept you—just as you are!"

The universe replied, "That's probably a good idea."

But the man insisted, "I'm going to tell everyone how great you are!"

"I owe you nothing," the universe replied. "Do me no favors."

The statements that follow deal with the story you have just read. How would you classify them?

		Right	Probably Right	Wrong	Probably Wrong	Can't Tell
1.	The man was very old.					
2.	The man had suffered a great deal.					
3.	The man loved everything about the universe.					
4.	At first the universe agreed with the man.					
5.	The universe didn't want to be flattered.					
6.	The man wanted a favor from the universe.					
7.	The universe told the man it would not change itself to suit him.					
8.	The universe heard the man and understood him.					
9.	The man heard the universe and understood it.					

ML

EXERCISE: Reasoning problems for discussion

1. Steve: "The food in the school cafeteria is terrible!"

Woody: "Yeah, and they give out such small portions!"

Is Woody consistent when he complains both about the quality of the food and the size of the portions?

2. Desert Rat 1: "There seems to be a town out there! I can even read the name on the water tower!"

Desert Rat 2: "What's the name of the town?"

Desert Rat 1: "Capacity."

Desert Rat 2: "What's the population?"

Desert Rat 1: "I'm not sure, but it says there are 10,000 gals."

If you don't find the two ambiguities here, do you think you ought to start the *Pixie* course over?

3. Lula: "I always lie."

Hans: "That's a lie!"

Are the two statements inconsistent? Is Lula's statement self-contradictory?

4. Grace: "Why should the word 'grease' contain the letter 'j'?"

Hope: "The word 'grease' doesn't contain the letter 'j'."

Grace: "Well, why doesn't it contain the letter 'j'?

Hope: "Why should the word `grease' contain the letter 'j'?"

Grace: "That's what I asked you in the first place!"

How is the word "should" used?

5. Fritz: "What cat has eight lives?"

Felix: "No cat has eight lives."

Fritz: "Right. And does one cat have one more life than no cat?"

Felix: "Of course."

Fritz: "Well, then, one cat has nine lives."

Is there a cat that is "no cat"?

Teacher Self-Evaluation Chapter Ten

- 1. Did the children dramatize the three stories in Chapter Ten?
- 2. Did they seem to learn something in the dramatization of stories that they haven't learned in the philosophical discussions?
- 3. Did a student lead the discussion regarding *The Lady and the Magician* story?
- 4. Have each of my students written a creative story in the last month?
- 5. Have I encouraged my students to direct the dramatization of their own stories?
- 6. Can students distinguish between a parable, a fable and a myth?
- 7. Have my students gained practice in the skill of interpretation as it pertains to three stories in Chapter Ten?
- 8. Can students defend their interpretation of each of the stories?
- 9. Do I recognize strengths in each of my students I never saw before?
- 10. Did I learn anything about *the skill of interpretation* from my students doing this chapter?

CLAS	CLASSROOM DIALOGUE				
Date					
Topic					

WHAT THE STUDENTS ACCOMPLISHED DOING THIS CHAPTER

Specific Skills Taught

Specific Skills Reenforced

Specific Skills to Work on in the future

REASON THEY WORKED

EXERCISES IN THIS CHAPTER THAT WORKED

STUDENT EVALUATION	
Students who talked to me many times while doing this chapter.	
Students who directed remarks to other students many times while doing this chapter.	
Students who are regularly giving reasons for their views during discussions.	
Students who were very silent during classroom discussions.	
Students who are not giving reasons for views they express	

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Students who need work on directing their comments to other students rather than to me. Students who need work on drawing correct inferences in classroom discussions. Students who might be inhibiting others from talking during classroom discussions. Students who need teacher encouragement to elaborate on their ideas, especially in terms of what follows from what they say. Students who need extra help on _____ skill ____ one of the thinking skills covered skill _____ in this chapter. _____ skill _____ _____ skill _____ skill ____

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CHANGES I WOULD MAKE NEXT TIME I DO THIS CHAPTER

CORRELATED EXERCISES
I WOULD USE

438

OTHER

Chapter Ten

OVERLAPPING THEMES FROM THIS CHAPTER WHICH OCCUR IN OTHER DISCIPLINES I TEACH

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CHAPTER ELEVEN

Episode I

(pp. 90-95)

Brian's version

Most of the final chapter in *Pixie* is devoted to the Fourth Act of the children's performance in the auditorium. It will be recalled that this is solely Brian's version of the story, because he heard it from Pixie directly. Children may be tempted to say that because in this case there was only one intermediary between Pixie and the dramatization, this must be the most authentic of the four versions. This certainly would be debatable. A group of literal-minded children could pass the story from one to the other with very little change, while, on the other hand, a very imaginative child could singlehandedly change the story almost beyond recognition. There is, therefore, no reliable way of knowing whether Brian's version is either more or less accurate than the others.

Fiction and "real life"

Another difference between Act IV and the three preceding acts is that the puppets do not represent fictional characters but are instead representative of Brian and Pixie, and while Brian plays himself, Robert has to act Pixie's part. In view of the fact that Pixie is sitting in the audience, this must have placed a real burden on Robert.

Philosophical stories and fairy tales

Pixie tells us, "It wasn't anything make-believe." Perhaps this is one of the ways in which philosophical children's stories differ from other children's stories, such as fairy tales. Generally, the philosophical story (an example of which would be the first nine chapters of Pixie) avoids experiences which are fantastic or implausible in order to arouse the reader's wonder at the world as it exists. But, obviously, this is not the only way in which wonder can be aroused. Fiction, under certain circumstances, can do as well as the last two chapters in Pixie indicate.

Act IV: Brian's Story Central Themes and Questions for Discussion

- 1. When we look up in the heavens, do we perceive lights or stars?
- 2. Do we perceive the stars as we know them to be, or as we see them? (We see them as lights; we know them as stars.)
- 3. Why do you think Pixie insisted that Brian begin with "Once upon a time?"
- 4. What are ideas?
- 5. Are ideas the same as thoughts?
- 6. Does everything in the world have an idea, or is it that every type of thing in the world that has an idea?
- 7. Is there one idea for every frying pan, or one idea for all frying pans?
- 8. How is it that you can have ideas of things you can't touch, like friendship, but you might not have ideas of things you can touch like feud, hair, and dirt?
- 9. If there are perfect ideas of perfect chairs does this imply that there are (a) imperfect ideas of perfect chairs, (b) imperfect ideas of imperfect chairs, and (c) perfect ideas of imperfect chairs?
- 10. If something is perfect, does it have to be happy?
- 11. In the other acts, were there parts of the body that wanted to be something different from what they were?
- 12. In Brian's story, do the ideas want to be something different from what they are?
- 13. Earlier Pixie said, "But all I could think was that my mystery creature turned out to be practically nothing at all just the name of a class, and not something warm and furry, with a wet nose and soft brown eyes." Do you see any resemblance between Pixie's saying that the conversation between the idea of the pillow and the idea of the bed on page 93?
- 14. Is the explanation of why the ideas came to earth similar to the explanation given by the Little Prince of why he came to earth?
- 15. How could the ideas give shape to the stuff that they found in the world?
- 16. Pixie suggests the way snowballs are made, or the way fudge is made into squares. Would an even better example have been the way a cookie cutter forms the dough into different shapes?
- 17. Brian says the ideas gave form to the blobs by sharing. How could that be?
- 18. How did the ideas give shape to the blobs?
- 19. Did they impress themselves on the matter?

- 20. Count it be that there is only one idea for all chairs?
- 21. Could it be that all chairs share in the Idea of the chair?
- 22. For example, if the matter was soft and fluffy, wouldn't the idea of the chair turn the matter into an overstuffed arm chair?
- 23. If you have a relationship such as "Isabel is as gentle as Miranda" what is the relationship? What is the sharing?
- 24. What is it to put your room in order?
- 25. Your room was a mess, and you straightened it out. Then, you put the different parts where they belong. Is it ever like that with your mind? Your thoughts are all jumbled up. You wish you could figure things out or somebody would explain things to you so your mind would be put in order. Can't a story sometimes do that?
- 26. So what were the two tasks of the ideas?
- 27. Brian says there is only one idea for each person. Do you agree with Brian on this?
- 28. Wouldn't it have been more correct for Brian to say that in the case of common nouns, many things share the same idea? In the case of proper nouns, is there only one idea for each thing? Thus, all the horses that have ever lived, or ever will live, share in the idea of a Horse. But there is only one Trigger and one Black Beauty.
- 29. Are ideas destructible?
- 30. Why were the ideas disappointed when they came to Earth?
- 31. Is it true that most houses are ugly?
- 32. Is it true that not many people do nice things?
- 33. Why didn't the ideas complain at first?
- 34. What does it mean to have amnesia?
- 35. How did the ideas know that certain animals were beautiful?
- 36. How did they know good from bad?
- 37. How did they know truth from falsehood?
- 38. Is Brian suggesting that the test of what is true or beautiful or good lies in whether it "reminds" one of the perfect world one once lived in?
- 39. When are people happy?

DISCUSSION PLAN: From ideal to their opposites ... and back (p. 91, line 18)

Consider this conversation:

Pixie: "What's the opposite of truth?"

Miranda: "Falsehood."

Pixie: "So how would I get from falsehood to truth?"

Miranda: "By correcting what you believe."

Pixie: "But how would I do that?"

Miranda: "Find out where you went wrong."

Pixie: "Is that all?"

Miranda: "Oh, it would also help to find out what's right."

In each of the following cases, state the opposite, and say how you would go from the opposite back to the ideal.

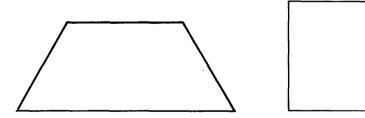
- 1. beauty
- 2. goodness
- 3. friendship
- 4. love
- 5. success
- 6. justice
- 7. health
- 8. happiness
- 9. wisdom

DISCUSSION PLAN: Do we observe what we see or what we know? (p. 90, lines 11-16)

At night you look up at the sky and you see light. You know they're stars, so you say, "I see stars." But actually, Brian claims, all you see are lights.

Let's try some examples:

- 1. You're standing on a railroad tie, looking at the tracks. They look as if they come together, but you know they don't. So would you say you see them converge, or wouldn't you?
- 2. You're seeing a sad movie and you can't help crying. Your friend says "It's only a movie!" and you reply, "I know that, but I still can't help crying!" Does your friend's knowing it's only a movie keep him from crying?
- 3. At Thanksgiving, you visit a farm, and you know that the turkey dinner is made from the same turkey you fed and talked to the day before. Does knowing that make a difference in the way it tastes?
- 4. You are asked to draw the top of your kitchen table, as it looks to you while you're seated at the table. You *know* the top is square. Would you draw it like the figure on the right or the one below?



5. You've said "So long," hundreds of times before to your friend. But this time may be different. She's moving away, and you know you may never see her again. How does that make her look different to you?

ML

DISCUSSION PLAN: Sharing

(p. 93, line 17)

- 1. At the zoo, Nikki fed half her sandwich to the squirrels. Does that mean she *shared* her sandwich with the squirrels?
- 2. Suppose each child who went to the zoo had to buy an admission ticket. Does that mean that the children *shared* the cost of admission?
- 3. Suppose there were not enough books to go around, so Nikki and Willa Mae used the same copy. Does that mean they *shared* a copy?
- 4. Suppose Tommy and Neal take turns using a certain chair Tommy uses it every morning, and Neal sits in it every afternoon. Does that mean they *share* the same chair?
- 5. Suppose Chita and Kate go together to see a movie. Do they *share* the movie?
- 6. Suppose Pixie has a secret and tells it to Isabel. Does that mean that Pixie and Isabel *share* the same secret?
- 7. Suppose Pixie discovers another girl who has the same name Pixie has. Does that mean Pixie and the other girl *share* the same name?
- 8. Suppose there are two cows standing in a meadow. Do they share the word "cows"? Do they share the same meadow?
- 9. Do England and New England share the name "England"?
- 10. Suppose Pixie and Isabel have the same idea of Brian. Does that mean they share the same idea?
- 11. If you *participate* in a class discussion, does that mean you *share* in the discussion?
- 12. If you watch a TV show, do you participate in the show?
- 13. Do all the cows in the world *participate* in the idea of a cow?
- 14. If you are a participant in a school play, does that mean you have a share in the play?
- 15. If your school play is your version of Alice *in Wonderland*, does that mean you have shared in *Alice in Wonderland*? Does it mean you have participated in *Alice in Wonderland*?
- 16. Is this the difference between *sharing* and *participating* that *sharing* means *to have a part of,* and *participating* means *to be a part of?* If not, why not?

EXERCISE: Word orders and word types

(p. 94, lines 1-6)

In this exercise, you will discover that the rows across show a certain order of words, while the columns down show a certain word *type*.

I. Let's begin with a sentence that contains five words:

1 2 3 4 5 The rabbit ate the cheese.

Notice that we have numbered the words; these are also the numbers of the columns. Now, you construct different sentences, each of five words. Put the same kinds of words in the same columns, and the sentences will all have the same order. For example:

My uncle quit his job.

II. When you have finished the above exercise, by making up a number of fiveword sentences, try constructing sentences of a different number of words.

For example:

ML

EXERCISE: The one and the many

(p. 94, lines 9-12)

There are four kinds of relationships between the one and the many:

- a) one many. Example: the word "chair" to all the chairs in the world.
- b) one one. Example: the words "Abraham Lincoln" to Abraham Lincoln.
- c) many one. Example: people in a movie theater moving towards a single exit.
- d) many many. Example: a group of citizens voting for a group of candidates.

How would you classify the following instances:

		one-	one-	many-	many-	
		many	one	one	many	?
1.	The word "Earth" to our planet.					
2.	The word "moon" to what it refers to.					
3.	The word "Snoopy" to what it refers to.					
4.	The word "dog" to what it refers to.					
5.	The lines of the parachute to the chutist.					
6.	The citizens to the President.					
7.	The President to the members of Congress.					
8.	The teachers in your school to the students.					
9.	The words in Pixie to your mind.					
10.	The words in Pixie to your thoughts.					
						ML

Once upon a time, there was an invasion of the planet Earth by an army of Blue Meanies from the planet Krypton. The Blue Meanies announced that their enemies were not people but ideas. They therefore ran a contest in every school in the world, offering prizes for the best composition of three sentences on the topic, *How to Destroy Ideas*.

What would you have written?

EXERCISE: Can an idea be destroyed?

ML

(p. 94, lines 15-22)

Episode 2

(pp. 96-98)

Robert's criticism of Brian's version

Robert scoffs at Brian's version of the story. He doesn't care who made it up, he says; the fact is, it was silly. The reason it's silly is that everything has its own shape. These shapes did not come from the stars. As for ideas, they don't come from anywhere except our brains.

Brian's reply: both theories could be fairy tales

Brian dismisses Robert's account as also being a fairy tale. Robert replies that there is a simple way to decide who is right. In a true story the ideas resemble the way things are in the world. In a fairy tale the ideas are different from the way they are in the world. Brian is not impressed. Even if we accept what you say, he tells Robert, your story remains a fairy tale.

Implications of the two positions

The very first few lines of Brian's story may provide a clue to his thinking on this topic. Two ways we can tell what is real are: We can trust our senses, or we can rely on what we can deduce. In either case, the things we discover would reflect our ways of acquiring knowledge. To say that each thing has its own shape, independent of our perceiving and knowing, is unintelligible to Brian. The argument between Brian and Robert boils down to Robert saying, "Things are the way they are whether we perceive them or not," whereas Brian is saying, "To be is to be perceived." At the end of the Act, Brian says, "That's the way we planned it." In other words, the two points of view are very different, but the question of who is right may be insoluble.

Can an event in the past be reconstructed by relying on later accounts?

Robert then asks Pixie which of the four acts was closest to her story. Pixie says "none of them." Whether we can believe her or not is an open question. She admits that she has a stake in denying that any of the stories were like hers. She actually cites the advantages of not revealing her story.

How do we know we know?

Neil and Isabel tell her that they know two of her mysteries. Pixie says, "Are you sure?" Perhaps she is thinking, you might be very gullible, ready to believe something without justification. When anybody says, "I know", a philosopher like Pixie is simply going to come back and say, "How do you know you know?" In other words, by what criteria are you able to assert that this is a case of *knowing*? Pixie's question, or implied question, "How do we know we know?" is a legitimate and pertinent question which underlies much of her efforts to understand.

DISCUSSION PLAN: Ideas

(p. 96, lines 5-9)

- 1. What is an idea?
- 2. Have you had an idea that was all your own? What was it like?
- 3. Where do you think ideas come from?
- 4. Where did they come from in Brian's story?
- 5. Why weren't the ideas happy when they were perfect and at home?
- 6. What did the ideas need to make them happy?
- 7. Why do you think the ideas picked Planet Earth to come to?
- 8. What was the work of the ideas once they got to Planet Earth?
- 9. What were things like before the ideas came to Planet Earth?
- 10. Did the ideas make Planet Earth a better place to live? Why or why not?

AMS

DISCUSSION PLAN: Ideas

(p. 96)

- 1. Can you touch an idea?
- 2. Can you touch beauty?
- 3. Can you touch or see goodness?
- 4. Can you touch or see friendship?
- 5. Can you touch goodness?
- 6. Is color an idea?
- 7. Are relationships ideas?

AMS

DISCUSSION PLAN: Brian's story

(p. 96)

- I. "Brian must be right," said Pixie. "Why do you think so?" answered Isabel. "Well," Pixie explained, "Brian says there are only ideas and things. And I know I can have an idea of a duck or a zebra or a lion, because I saw them at the zoo. But I can also have an idea of a unicorn, even though I didn't see one at the zoo or any place else. Since I've never seen a unicorn, and since there are only ideas and things, wouldn't my idea be an idea of the idea of a unicorn?
 - 1. Do you think Pixie has shown that Brian is right?
 - 2. Could Brian be wrong in hinking there are only ideas and things? (For instance, if New York is far from San Francisco, is the relationship less real than ideas and things? Moreover, if grass is green, is the color less real than the grass?)
 - 3. Are colors ideas?
 - 4. Are colors things?
 - 5. Are relationships ideas?
 - 6. Are relationships things?
 - 7. Are relationships real?
 - 8. Can you have an idea of a unicorn without its being an idea of an idea or an idea of a thing?
- II. "Brian must be wrong," said Pixie. "Why do you think so?" answered Isabel. "Well," explained Pixie, "Brian says things share in ideas, just like we share our friendship, or when Mr. Mulligan reads us a story, we all share in listening to it. But what if we all shared in a birthday party and there wasn't enough cake and ice cream to go around? What then would happen to the perfect idea of the perfect birthday party?"
- 1. Do you think that Pixie has shown that Brian is wrong?
- 2. Can there be a perfect birthday without having an idea of a perfect birthday party?
- 3. Could you know you'd had a bad birthday party if you didn't already have an idea of a good birthday party?

DISCUSSION PLAN: Brian's story

(p. 96)

- 1. On a clear night, do you see stars, or do you see lights? Do you really see lights, but think you see stars; or do you really see stars? Is there a difference between really seeing and only thinking that you see?
- 2. What is an idea?
- 3. If you can have ideas of frying pans and of numbers, can you have ideas of ideas?
- 4. What does `perfect' mean?
- 5. Brian said the idea of the chair was the perfect idea of the perfect chair. Could you have an imperfect idea of a perfect chair? What about a perfect idea of a chair that isn't perfect?
- 6. Is the world made up of things and ideas; or just of things; or just of ideas?
- 7. Are there some things you can't possibly have ideas of? Are there some ideas that are not ideas of things?
- 8. If a pillow is soft, does that mean that the idea of the pillow is soft?
- 9. In Brian's story, the ideas were first in the sky, then they came to earth. If you have an idea of Australia, where is the idea?
- 10. Can ideas be destroyed? If Australia were destroyed, would the idea of Australia still exist? Suppose the idea of Australia were destroyed: would Australia still exist?
- 11. What did Pixie mean when she said that she and Isabel shared being friends?
- 12. Do you agree with Brian that wherever there is a relationship, there is a sharing? Can you think of any kind of relationship where that isn't true?
- 13. If you need a different idea for every person; why don't you need a different idea for every chair?
- 14. Brian said that most houses are ugly and most sentences are false. Could there be a world in which no house were ugly? Could there be a world in which no sentences were false?

MJW

DISCUSSION PLAN: Remembering and learning

(p. 97, lines 2-6)

- 1. Do you think that there were thoughts before there was anyone to think them? Where were they?
- 2. Do we discover ideas?
- 3. Do we invent them?
- 4. Do we just have them?
- 5. Before you were born, do you think that there was an idea of you somewhere?
- 6. Can you remember things you never knew before?
- 7. Can you learn things that you never knew before?

GE

EXERCISE: Same and different meanings

(p. 97, lines 22-25)

Herb says, "It's raining outside."

Which (if any) of the following statements have the same meanings as Herb's statement, and which have different meanings?

			Meaning is different from Herb's meaning	the same
1.	Clare:	"I think it's raining outside."		
2.	Caddy:	"It's pouring outside."		
3.	Judd:	"I know it's raining outside."		
4.	Gloria:	"It's a fact that it's raining outside."		
5.	Tim:	"I believe it's raining outside."		
6.	Nancy:	"I hope it's raining outside."		
7.	Della:	"It's true that it's raining outside."		
8.	Gil:	"I'd swear it's raining outside."		
9.	Max:	"It must be raining outside."		
10.	Dimples:	"Wow, it sure is raining outside."		
11.	Meg:	"Why does it always have to rain outside?"		
12.	Hilda:	"Going out? Take an umbrella!"		
13.	Luke:	"The sky is crying."		
14.	Mitzi:	"It would be false to say that it's not raining outside."		
15.	Shep:	"The rain, it's plain, goes mainly down the drain!"		
16.	Carla:	"It's drizzling outside."		
17.	Henry:	"It always rains on Tuesdays, and today's Tuesday!"		
18.	Pete:	"It's raining, all right, but not inside."		
19.	Gina:	"Oh, why does it have to be raining today?"		
20.	Sam:	(entering, soaking wet) "It's raining cats and dogs out there!"		

DISCUSSION PLAN: How do we know anything?

(p. 98, lines 16-17)

- 1. Do you know that a dime is worth 10 cents? How do you know?
- 2. Do you know that July and August are months that you are not in school? How do you know?
- 3. Do you know that Winter follows Fall? How do you know?
- 4. Do you know that the Wizard of Oz gave the Tin Woodman a heart? How do you know?
- 5. Do you know that sometimes you feel very sad? How do you know?
- 6. Do you know that 4 + 4 = 8? How do you know?
- 7. Do you know that Philadelphia is the capitol of Pennsylvania? How do you know?
- 8. Do you know that rain helps the flowers grow in the spring? How do you know?
- 9. Do you know that fire burns your hand? How do you know?
- 10. Do you know that you have ideas? How do you know?
- 11. Do you know that when you stub your toe, it hurts? How do you know?
- 12. Do you know that your classmates have ideas? How do you know?

AMS

EXERCISE: Knowing

(p. 98, lines 13-14)

For the following, state (1) how you know, (2) why you know, (3) what you can do with what you know:

- 1. multiplication tables
- 2. capitols of all the states in the U.S.
- 3. how to write a sentence
- 4. what mammals are
- 5. that it is not raining
- 6. how to read
- 7. the rules of school
- 8. family rules
- 9. traffic rules
- 10. how to ride a bicycle
- 11. how to play soccer
- 12. cooking

AMS

EXERCISE: Reasoning problems for analysis

Sometimes, when we discover a way of interpreting something that is different from what we had expected, we are surprised, and we think of the surprise ending as "funny."

Sometimes we laugh because we realize that a person is being inconsistent with what he had said earlier. (We sometimes say the result is incongruous.)

See if you can analyze the following in accordance with the questions in the column on the right.

1. Teacher: "I'd like the students in this class to think for themselves.

Martin, you have opinions of your own, don't you?"

Martin: "Yes, but I don't believe them."

Can a person be consistent who claims not to believe his own opinions?

2. Jean: "Martha, what in the world did you do to your dress? It looks

like you dyed it!"
Martha: "I did dye it."

Jean: "Well, my goodness, I'd never have known it."

Is Jean saying that the dress looks like it was dyed, and looks like it wasn't?

3. Jeremy: (on telephone) "Hello, is this Jonathan?"

Voice: "You must have the wrong number."

Jeremy: "Are you sure?"

Voice: "Have I ever lied to you before?"

What do you make of Jeremy's question, "Are you sure?" Is it appropriate? Is the answer he gets appropriate?

4. Roger: "What's different now about this breakfast cereal? I see it says

'NEW' on the package."

Mort: "Oh, it's not the cereal that's different. It's the package."

Roger: "Oh? What's different about the package?"

Mort: "It now says 'NEW' on it!"

Could the word 'NEW' on the package or to its contents? Would the word 'NEW' on the package make it a new package?

5. Mindy: "Dusty, I've asked everyone in the class, and they all say they

don't have my book. Do you have it?"

Dusty: "Yes, here it is."

Mindy: "At last! Someone who doesn't lie!"

Did you interpret Dusty's remark as a confession? Were you surprised that Mindy complimented him for telling the truth? Is she correct to imply that the rest of the class lied to her? If Dusty told the truth, then didn't the others have to have told the truth?

ML

You have now finished reading *Pixie*, the story of how Pixie's story came to be. In this story, Pixie has given us some clues as to her mystery story.-We know it has something to do with mammals, and the difference between some mammals and persons. We also know it has something to do with thinking. What else do we know? After you've talked this over with your classmates, write, tell, or act out your interpretation of what you think Pixie's story could have been, based on the information that you know from reading the book *Pixie*, and the experience you have had discussing Pixie with your classmates. Then, maybe the last week of school, everyone could read, or act out their interpretation of Pixie's story.

Teacher Self-Evaluation Chapter Eleven

- 1. Did I encourage the students to dramatize Brian's story?
- 2. Did I encourage a number of students to direct the discussions regarding the meaning of Brian's Story on different occasions?
- 3. Did I encourage students to express their understanding of Brian's Story in art, music, dance, drama, writing—as well as discussion?
- 4. Do I know how I know anything?
- 5. Am I more aware of the complexity of interpretation?
- 6. Am I more aware of the complexity of thinking, ideas, and knowing?
- 7. Have I become more aware due to my students' discussions?
- 8. Have each of my students written his or her mystery story? Or has the class corroborated and written a class mystery story?
- 9. Can my students distinguish between believing, having an opinion, understanding, and knowledge?
- 10. Have I written my own mystery story?

CLASS		
Date		
Topic		

WHAT THE STUDENTS ACCOMPLISHED DOING THIS CHAPTER

Specific Skills Taught

Specific Skills Reenforced

Specific Skills to Work on in the future

REASON THEY WORKED

EXERCISES IN THIS CHAPTER THAT WORKED

STUDENT EVALUATION Students who talked to me many times while doing this chapter. Students who directed remarks to other students many times while doing this chapter. Students who are regularly giving reasons for their views during discussions. Students who were very silent during classroom discussions. Students who are not giving reasons for views they express

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Students who need work on directing their comments to other students rather than to me. Students who need work on drawing correct inferences in classroom discussions. Students who might be inhibiting others from talking during classroom discussions. Students who need teacher encouragement to elaborate on their ideas, especially in terms of what follows from what they say. Students who need extra help on _____ skill ____ one of the thinking skills covered skill _____ in this chapter. _____ skill _____ _____ skill _____ skill ____

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CHANGES I WOULD MAKE NEXT TIME I DO THIS CHAPTER

CORRELATED EXERCISES
I WOULD USE

DANCE EXERCISES

OTHER

OVERLAPPING THEMES FROM THIS CHAPTER WHICH OCCUR IN OTHER DISCIPLINES I TEACH

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REVIEW EXERCISES Part II

DISCUSSION PLAN: Classes and class membership

(lines 11-14)

- 1. Isabelle is the oldest member of the class. When she goes home she is the youngest member of the family. How can that be?
- 2. Richard has the reddest hair in the class. Does that mean that he has the reddest hair in the school?
- 3. Last year, Michael had the bluest eyes in the school. Does that mean that he has the bluest eyes in the school this year?
- 4. Suppose that all the red-headed kids were in one class in the school. The class is seated with the lightest red in the first seat, first row and the reddest in the last seat, last row. Is it possible to figure out how many redheaded kids are in the class?
- 5. Jimmy is the best student in mathematics. Does that mean he is the best student in reading?
- 6. George Washington is called the "Father of his Country." Does that mean that he had lots of children?
- 7. If Pixie has a cousin the same age as she is, does that mean that her cousin must be in her class?
- 8. In the Murphy family, Bill and Tod are twins. Does that mean that they must be in the same class in school?
- 9. If Carol is Mary's cousin, is it possible that she is Maureen's daughter?
- 10. If Tommy is Susan's uncle, does that mean that he has to be an adult?

ML

EXERCISE: Identifying types of relationships

- I. This is a matching exercise. The column on the right contains a number of relationships. The column on the left contains examples of those relationships. Draw a line from each item on the left to the relationship of which it is an example. (You may need more than one line in some cases.)
- 1. care is to safety as study is to understanding

part - whole means - end

2. oak is to tree as Ford is to car

cause - effect

squeezing oranges is to juice as grinding coffee beans is to coffee

carelessness is to accident as accident is to injury

instance - type identity (similarity of meaning)

5. quart is to gallon as glass is to quart

thing - property

6. rich is to wealthy as bashful is to shy

opposition (contrasting meanings)

7. candy is to sweet as sky is to blue.

sequence degree

- 9. large is to small as hot is to cold
- 10. clean is to dirty as fair is to foul
- 11. water is to wet as diamond is to hard
- 12. English is to language as Spain is to nation

table is to furniture as robin is to bird

- 13. travelling is to arriving as mixing ingredients is to baking a cake
- 14. Monday is to Tuesday as January is to February
- 15. drizzle is to rain as snow flurry is to snowstorm
- **II.** Let's take apart the analogies in Part I, and try to construct new similes based on these parts:

1.	The sky was as blue as	_ •
2.	The boy was as bashful as	

3. The was as hard as a diamond.

4. She was as careless as ______.

- 5. The was as small as ______.
- 6. Baking a cake is like ______.
- 7. Squeezing oranges is like ______.
- 8. A flurry of snow is like _______.9. Studying in order to understand is like ______.
- 10. Being wealthy is like ______.

III. Let's try a different approach:

- 1. How is the sky like candy?
- 2. How is a robin like a table?
- 3. How is water like a diamond?
- 4. How is a language like a nation?
- 5. How is travelling like baking a cake?
- 6. How Is safety like wealth?
- 7. How Is a Ford car like an oak tree?
- 8. How Is Monday like January?
- 9. Is it sweet to be rich? In what way?
- 10. How is being clean like being cold?

EXERCISE: Thing words and relations

By *thing words* is meant those words that refer to some kind of thing or place or person. (nouns)

By relation words is meant:

- (a) words that tell us how things are related to one another (adjectives)
- (b) words that say that something is done, or that something happens (verbs)

Now, some examples. Let's restrict ourself to a selection of words taken from a small portion of the dictionary: from words beginning with the letters *fa*:

nouns	adjectives	verbs
face, fact, fair, faith	faint, fair, fake,	face, fade, fail, fall
fame, family, fan,	false, familiar,	fan, farm, fasten,
fang, farm, father,	fancy, fantastic, far	favor
faucet, fault, favor	fast, fat, faulty,	
fawn	favorable	

I. Let's begin by putting some adjectives together with some nouns. But of course, not any adjective will go well with *any* noun: some fit better than others.

Examples: fat fawn, false face; can you supply some others?

II. Now, let's put some verbs together with some nouns.

Examples: face facts, fame fades. Can you supply some others? (Note: the verb can come first, or the noun can come first.)

Also, you might want to add -ing to the verbs, and make up a sentence. For example: The family is farming. The fan is falling.

III. Now, how about making up sentences using two nouns? For example: He found no fault with the faucet.

Your father did me a favor.

IV. Next, let's take each adjective as expressing a comparison between one of the nouns given above, and one which you supply. Examples:

A face as false as a mask

A fact as fantastic as a fairy tale.

V. All right, let's take our comparison sentences, and replace the adjective (and the word as before and after it) with the word like:

A face like a mask.

A face like a fairy tale.

We can, of course, put these in sentence form:

Her face was like a mask.

He told us ,a fact that was like a fairy tale.

What we now have, of course, is what is called a simile.

VI. At this point, we can remove the word *like*, and say that one thing is the other. This can be done in various ways: they are called *metaphors*. His face was a mask.

The fact he told us was a fairy tale.

VII. Let's go back to part II, where we were talking about verbs ending in -ing, like *facing*, *fading*, *failing* and *falling*. Put together an -ing verb and a noun, then add is like. for example:

A farming family is like _____ . A fading faith is like ____ .

It will be up to you to complete each sentence, by thinking up another -ing verb and another noun.

VIII. Finally, let's consider analogies. Here we have four nouns, arranged as follows: (1) _____ is to (2) _____ as (3) ____ is to (4) _____.

For example, if we take two nouns from our list, and put them in the 2nd and 4th positions, we would have:

_____ is to a face as _____ is to a farm.

We might complete this example this way: *A nose is to a face as a barn is to a farm.*

Your turn. Choose two nouns from the list that is given, and put them in positions 2 and 4. Then supply your own nouns for positions 1 and 3.

IX. Next time around, choose a different set of words. Using a small dictionary, pick two beginning letters (such as ge-, or lo-) and list the simpler nouns, verbs and adjectives you find on those pages. Then run through the above 8 operations again.

ML

EXERCISE: On Classes and Sentences

(lines 11-14)

- 1. Take the words, "plants," "sky", "earth," "trees". What do those words havein common?
- 2. Take the words, "dogs," "cats", "zebras" "elephants," and "owls." What do all the words have in common?
- 3. Take the words "triangles," "squares," "rectangles," and "circle." What do all of these words have in common?
- 4. Take the following words, "yellow," "green" "blue" and "black." What do these words have in common?
- 5. Can you make up a sentence using the words, "apple," "sky," and "tree"?
- 6. Can you make up a sentence using the words, "babies," "kittens" and "milk"?
- 7. Can you make up a sentence using the words, "model cars," "walkie-talkies," and "basketballs"?
- 8. Can you make up two sentences using the words, "chair," "rockers," "sofas," and "high-chairs"?
- 9. Can you make up two sentences using the words, "porch," "terrace" and "patio"?
- 10. Can you make up three sentences using the words, "Volkswagons," "trucks," "snowmobiles," and "tractors"?

ML

DISCUSSION PLAN: On Classes.

(lines 19-20)

Are there problems with anything in the following stories?

- 1. Pixie's father takes her for an outing. She sees the trapeze artist, the animals in the cage, the clowns and the elephants as well as the trained dogs, all under a big tent. Afterwards, she says to her father, "Daddy, when will I get to see the circus?"
- 2. Miranda and Pixie go to a parade. Pixie sees the trumpets march by, the drums march by, the clarinets march by, the trombones march by. Pixie then asks "Where's the band?"
- 3. Pixie sees the band go by, the floats go by, the baton twirlers go by. Pixie then asks Miranda, "Where's the parade?"
- 4. Pixie's family invites a child from another country for a summer visit. The visitor arrives and the whole family and the visitor go on a long trip. As they travel, Pixie explains to the visitor, "This is Ohio, this is Pennsylvania, this is New York, this is Maryland." The child turns to Pixie and says, "That was very nice, but when do I get to see the United States?"
- 5. Pixie's older sister is thinking of going away to school. One day, her mother and father suggest that they take a trip. They visit the dormitory, the library, the classrooms, the tennis courts. On the way home in the car, Pixie says to Miranda, "It was a nice trip. But I didn't see the school. Where exactly was it?"
- 6. Pixie's friend, Tommy, wants to go to the Cubs' ballgame, because he heard that they "had such spirit." Tommy sees the team's catchers, the team's pitchers, the team's outfielders. After the game, Tommy says: "I know who throws the ball, I know who catches the ball, I know who hits, runs and fields. But where's the team's spirit?"
- 7. Pixie's school has a lively piano player, a lively violinist, a lively drum player. Does that mean that the school orchestra is lively?
- 8. Pixie's teacher said to her yesterday, "Pixie, did you read the book?" Pixie says, "I read all the pages, but I didn't read the book."
- 9. "How did you like the concert last night, Miranda?" "Well, the tenor sang all the notes." Does that mean that the concert was good?
- 10. Each member of Pixie's class has a poetry book. The teacher assigns the first poem for homework. The next day, the teacher says to Pixie, "Did you read the first poem?" Pixie answered, "I read all the words, and I understood what each word meant. But I didn't understand what the poem meant."

EXERCISE: Reasoning for reading comprehension

Harry's Late Morning

Harry knew he would be late for school. He just knew it!

"Hurry," his mother said anxiously as he gulped the last of his milk, "school begins in only fifteen minutes."

Harry groaned. His morning has begun late because of the bird outside his bedroom window-the one he watched lazily until the smell of eggs and bacon told him it was time for breakfast. Already! After that, everything else just seemed to happen later and later. Harry was late getting washed and dressed, and trying to tie the shoelace that had broken the day before made him even later. Then Harry thought of the math problems Mr. Spence assigned in class on Tuesday, and as he was finishing them over breakfast, he wondered why he did not remember to do them earlier.

Harry wiped his mouth with the back of his hand, grabbed his sack lunch, and after stopping briefly to pat his dog, King, on the head, hurried out the front door thinking, "If you're late, you're late. How can I possibly get to school on time?"

I. Read the following statements about the story, and then classify them.

		must be correct	probably correct	must be incorrect	probably incorrect	can't tell
1.	Harry forgot to wash after he got up.					
2.	Harry dressed before eating breakfast.					
3.	Harry was late for breakfast.					
4.	Harry saw a robin outside his bedroom window.					
5.	Harry wore shoes with buckles to school.					
6.	Harry ate cereal for breakfast.					
7.	Harry's mother thought Harry might be late for school.					
8.	Harry didn't complete his math homework on Tuesday.					
9.	Harry likes his dog, King.					
10.	Because he stopped to pet his dog, Harry was late for school.					

- **II.** Read the following groups of sentences, and then complete the statements below.
- 1. Before .going to bed, Harry brushed his teeth. But before he brushed his teeth, Harry read a book, and then he worked for a while on his model airplane.

First, Harry ______ .

Next, he _____ .

After that, he ______.

Finally, Harry ______.

2. Finally, after cleaning his room, Harry went out to play. He had already finished his homework earlier in the day, and before that he had helped his father wash the car.

 First, Harry
 .

 Next, he
 .

 After that, he
 .

Finally, Harry ______.

- III. Circle the answer you think is correct.
- Harry, Lisa, and Tony were all late for school. But Harry was later than Lisa, and Lisa was later than Tony.
 Who was the latest of all? (Harry / Lisa / Tony / can't tell)
- 2. Harry, Lisa, and Tony all finished their homework early. But Harry finished earlier than Lisa, and Lisa finished earlier than Tony. Who finished the earliest of all? (Harry / Lisa / Tony / can't tell)
- Harry finished his ice cream before Tony, and Tony finished his after Lisa.
 Who finished first? (Harry / Lisa / Tony / can't tell)
 Who finished last? (Harry / Lisa / Tony / can't tell)
- **IV.** If Harry was late getting up, late getting dressed, and even late for breakfast, does this mean he was also late for school? Explain.
- **V.** In the story, Harry thinks, "if you're late, you're late." Write down in you own words what you think he meant.

"Harry's Late Morning": Guidelines and Answers

I. Classifying statements about the story

1. must be incorrect If Harry washed late, he washed.

2. must be correct Students will need to recognize words indicating temporal

sequence of events. See Exercises II and III.

. probably correct This is strongly suggested by the story.

4. can't tell We know he saw a bird, but not what kind.

5. probably incorrect Harry struggled with his shoelace. Did he give up and change

to buckle shoes? See Exercise on What Can Be Assumed.

6. probably incorrect The smell of eggs and bacon told Harry it was time to eat

breakfast. Did he have cereal instead? See exercise on What

Can Be Assumed.

7. probably correct Is there any other plausible explanation for what Harry's

mother said, and said anxiously?

8. must be correct Again, words indicating temporal sequence are important.

(given assumption that See Exercises II and III

it's not still Tuesday)

). probably correct This seems the most likely reason for Harry's action. But

maybe King bites Harry if he doesn't get his goodbye pat.

10. can't tell Was Harry late? If so, was this the reason?

II.

- 1. read a book; worked on his model airplane; brushed his teeth; went to bed
- 2. helped his father was the car; finished his homework; cleaned his room; went out to play

III. 1. Harry; 2. Harry; 3. can't tell, Tony

If students have problems with this exercise, a visual representation of the temporal relationships involved might help. It might even help to switch for a while to other more "visualizable" relationships of the same sort—e.g., taller than, bigger than. These can be easily substituted for the temporal relationships given in the exercises. (Harry, Lisa, and Tony are all tall. But Harry is taller than Lisa, and Lisa is taller than Tony. Who is the tallest of all?)

- **IV.** Encourage students to construct plausible accounts of both alternatives being late for school and not being late for school.
- **V.** How do we interpret such remarks? Here are some parallel examples with which to work:

A gambler on a winning streak: "When you're hot, you're hot."

A rich man who picks up a penny from the sidewalk: "A penny is a penny."

A boy, sceptical about his mother's new way of fixing carrots: "Carrots are carrots."

A girl wearing a sweater on an 80° day: "If you're cold, you're cold."

DL

EXERCISE: Reasoning for reading comprehension

The Bubble Gum Cookies

Lisa and Jill often spent their Saturday afternoons together. After all, they were best friends, and, besides, they lived near each other. Usually they just talked. But sometimes Jill and Lisa did special things, like the time they made a circus of animals with Jill's modeling clay, or the time Lisa's mother let them make cookies.

Just the thought of those cookies made Jill chuckle! That afternoon of careful measuring and mixing had produced only rubbery blobs which even Lisa's dog, who would eat anything, refused to swallow. Lisa and Jill's "special" cookies, made with the "special" silky smooth flour they had discovered in an unmarked canister next to the ordinary coarse and powdery stuff, had turned out to be very special indeed.

"These are bubble gum cookies!" Lisa said defiantly when her older brother began to tease the girls about their cooking skills. But it was not until Lisa's mother explained that silky smooth cornstarch is not a "special" kind of flour but something quite different that the girls finally understood what had gone wrong and could laugh about the incident.

I. Read the following statements about the story, and then classify them.

		must be correct	probably correct	must be incorrect	probably incorrect	can't tell
1.	Lisa and Jill made cookies on a Saturday afternoon.					
2.	Lisa lives next door to Jill.					
3.	Lisa and Jill followed a recipe for bubble gum cookies.					
4.	Lisa's dog eats carrots.					
5.	Lisa's mother helped the girls make cookies.					
6.	Lisa and Jill used cornstarch to make their cookies.					
7.	Cornstarch feels different from flour.					
8.	Lisa and Jill's cookies were pink.					
9.	Lisa didn't mind her brother's teasing.					
10.	When they took their "special" cookies out of the oven, Lisa and Jill laughed.					

- **II.** For each of the following sentences, see if you can give another word for the word "special" and still keep the meaning the same.
 - 1. My birthday is a special day for me.
 - 2. I have a special way of remembering names.
 - 3. The store is having a special today on dairy products.
 - 4. Read all about it in the special edition of the newspaper.
- **III.** The story tells us that Lisa's older brother teased the girls about their cooking skills. What do you think he said or did to provoke Lisa's response, "These are bubble gum cookies!"?

When Lisa said, "These are bubble gum cookies!" she said it *defiantly*. What does this tell you about how she felt about her brother's teasing?

IV. Read the following statements, and then classify them.

		correct	incorrect	not sure
1.	If Lisa and Jill live next door to each other, they live near each other.			
2.	If Lisa and Jill live near each other, they live on the same block.			
3.	If Lisa and Jill live in the same town, they live near each other.			
4.	If John weights 180 pounds, he is heavy.			
5.	If John weighs 50 pounds more than most people his age and size, he is heavy.			

"The Bubble Gum Cookies": Guidelines and Answers

- **I.** Classifying statements about the story
- 1. must be correct Story tells us that making cookies was one of the special things the girls did on a Saturday afternoon.
- 2. can't tell We know the girls live near each other, but the word "near" is vague. See Exercise IV.
- 3. probably incorrect This seems improbable since the "bubble gum" quality of the

cookies was the result of a mistake. Still, such a recipe could have been followed—e.g., a recipe for pink, bubble gum-shaped

cookies lacking a bubble gum texture.

4. can't tell Even though the story says that Lisa's dog eats anything, we know

it refuses the cookies. What about carrots? More information is needed (e.g., the dog eats any kind of vegetable). Make sure to

discuss this use of exaggeration.

5. probably incorrect If she had helped, would the cornstarch mistake have been made?

But then, she might have helped only part of the time (finding a

recipe, greasing the cookie sheets).

6. must be correct Students will need to see identifying function of repeated

description "silky smooth."

7. must be correct Again, students will need to see that "silky smooth" and "coarse

and powdery" pick out different tactile sensations.

8. can't tell It is possible that there is some connection between the color of

the cookies and their name (most bubble gum is pink). But is the connection probable? See exercise on Possible versus Probable.

9. probably incorrect Is Lisa's defiant repsonse consistent with thinking she didn't mind

her brother's teasing? See Exercise III.

10. probably incorrect Story suggests that at first the girls didn't find the situation humorous.

- **II.** 1. important; 2. unique; 3. sale; 4. extra (Make sure to connect this exercise with the story: How is the word "special" used there?)
- III. What does it feel like to be teased? Why did Lisa's brother tease her? Student answers should be consistent with characteristics of teasing and character of Lisa's response. Help students "unpack" what the work "defiantly" suggests.
- **IV.** 1. correct; 2. incorrect; 3. debatable (How big is the town?); 4. incorrect; 5. correct

DL

EXERCISE: Reasoning for reading comprehension

Iane Starr's Dream

For a moment, just as she was waking up, Jane Starr felt as if she were still munching rice cakes and sugarcane. She could still taste the delicious sweetness and feel the coolness of the gold platter from which she was fed.

"What a strange dream!" Jane thought. "Imagine me a white elephant!"

Then Jane saw the book beside her pillow. As she picked it up, she began to read: "Elephant babies, or calves, are usually born in the spring, and remain constantly by their mother's side, until they are about five years old. They do not begin to use their trunks to get their own food until they have been weaned."

The night before, when she had read these same words, Jane hadn't been very interested in learning about silly animals that take baths in mud, and her eyelids had grown heavier and heavier. Now she read eagerly. She learned that white elephants are very rare and even considered a sign of good luck in India and Thailand, where they are treated like royalty. Jane smiled as she remembered how in her dream she had been washed with scented waters, dressed in the finest silks, and even given golden chains to hand around her thick white neck.

Jane Starr was not fond of baths. But on this particular morning, she soaked herself in a tub of luxurious bubbles. Next, she put on a dress she usually wore only to parties, and then after carefully braiding her hair, she tied it with a gold colored ribbon. Finally she was ready for school.

"Good day, your highness," Jane said with a parting wink to the white elephant posed in her mirror. Then, to herself, she said, "And I thought elephants were boring!"

Read the following statements about the story, and then classify them.

		must be correct	probably correct	must be incorrect	probably incorrect	can't tell
1.	Jane likes rice cakes.					
2.	Rice cakes are sweet.					
3.	Jane fell asleep reading a book about elephants.					
4.	Baby elephants are called "calves".					
5.	Baby elephants are born only in the spring.					
6.	All elephants eat with their trunk.					
7.	White elephants bring good luck.					
8.	In India, white elephants are washed with scented water.					
9.	Jane usually takes a bath in the morning.					
10.	Jane has long hair.					
11.	Jane wore a party dress to school.					
12.	Jane saw a white elephant in her mirror.					
13.	Jane thought her dream was boring.					
II.	Here are two meanings of the	word "ra	re".			

- **II.** Here are two meanings of the word "rare":
 - (A) something unusual or uncommon
 - (B) something unusual or uncommon and excellent, superior, or exquisite

Which meaning, A or B, does "rare" have in each of the following sentences? Circle your answer.

1.	She suffered from a <i>rare</i> disease.	Α	В
2.	Water in the desert is rare.	Α	В
3.	He has a <i>rare</i> talent for understanding the feelings of others.	Α	В
4.	Children who don't argue with their parents are rare.	Α	В
5.	It took a rare act of bravery to save the man.	Α	В
6.	Cris collects rare coins.	Α	В
7.	Alan enjoys rare wines.	Α	В

- **III.** For each of the following sentences, see if you can give another word or phrase for the word "pose" and still keep the meaning the same:
- 1. For Lisa, the fact that she couldn't invite all her friends posed a problem.
- 2. The model posed for the photographer.
- 3. The thief posed as an insurance salesman.
- 4. The food on the table was posed for the picture.
- **IV.** Fill in the blanks in the following sentences, using either "symbol" or "sign."
- 1. The dark clouds in the sky are a of rain.
- 2. Santa Claus is a of Christmas.
- 3. A heart with an arrow through it is a of love.
- 5. Yawning is a of tiredness.
- 6. Doves are a of peace.
- **V.** Why do you think some people consider white elephants a symbol of good luck?
- 1. Why do you think some people believe that finding a four-leaf clover will bring good luck?
- 2. Why do you think some people believe that walking under ladders will bring bad luck?
- 3. What do you think it means to talk about "good luck" and "bad luck"?

"Jane Starr's Dream": Guidelines and Answers

I. Classifying statements about the story:

1.	can't tell	Jane dreams she likes rice cakes. But has she really ever tasted
----	------------	--

them?

2. can't tell We only know that Jane dreamed she was eating something

sweet. Was it the rice cakes, the sugarcane, or both which seemed

to taste this way?

3. probably correct Of course, she might have stopped reading the book earlier,

perhaps because it was uninteresting and making her drowsy.

4. must be correct Students will need to see how the word "or" functions in the

passage Jane reads.

must be incorrect They are usually (not always) born in spring.

6.	must be incorrect	Unweaned baby elephants don't eat with their trunks.
7.	can't tell	Some people believe this is so. Does it follow it's true?
8.	can't tell	Again, the problem is the gap between what Jane dreams and what's real.
9.	can't tell	She has taken at least one morning bath. But when does she usually take them?
10.	probably correct	Short hair is difficult to braid.
11.	probably correct	She dressed in a party dress for school. Did she later change her mind—and dress?
12.	probably incorrect	Students will need to see how the reference to the elephant in the mirror relates to the "royal treatment" Jane gave herself.
13.	probably incorrect probably correct	What does "silly" mean? "Stupid" or "fun"? Choice of meaning will partially determine student response.

II. Answers can vary depending on how imaginative your students are in constructing contexts in which the statements might be used. Encourage this. It's a good way to help students see how context determines (in part) meaning. Make sure to ask how the word "rare" is used in the story.

III.

- 1. presented
- 2. (some description of what she did)
- 3. pretended to be
- 4. arranged. Make sure to ask how the word "posed" is used in the story.

IV. 1. sign; 2. symbol; 3. symbol; 4. sign; 5. symbol

Follow this up with exercise on page 229 of the Teacher's Manual for *Harry*. The aim is to help students to see what is involved in calling something a symbol. Exercise V should help to connect this to the story.

V. A good opportunity to critically examine superstition. See Teacher's Manual for *Harry*, pg. 30.

DL

EXERCISE: Figuring out underlying assumptions

For each of the following situations and inferences, see if you can figure out what assumption is being made. Then say whether or not you think the inference is okay.

			Infer	rence
Situation	Inference	Assumption	is okay	is not okay
Frank sneezed.	He has a cold.			
Al is the biggest person in school.	Al must be a football player.			
Joe discovers a rip in his pants.	Joe will change into something else.			
Jean's mother is cooking pancakes for breakfast.	Jean will eat pancakes for breakfast			
Helen and Karen are mad at each other.	Helen and Karen had a fight.			
A man is arrested by the police.	He must be guilty of a crime.			
Peter made hristmas tree cookies.	The cookies are green.			
Susan forgot to study her spelling.	Susan will do poorly on the test.			
The book is very old.	It's probably not interesting.			
Pete plays with his cat every day.	Pete likes his cat.			

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