The NEW DIRECTIONS IN CREATIVITY program, under the direction of Joseph S. Renzulli, includes the following manuals:

- MARK A
- MARK B
- MARK 1
- MARK 2
- MARK 3
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In children creativity is a universal. Among adults it is almost nonexistent. The great question is: What has happened to this enormous and universal human resource? This is the question of the age and the quest of our research.

Whenever teachers ask me how I became interested in creativity and why I developed a creativity training program for children, I often answer by referring to the quotation and the two cartoons on page vi. The quotation from Harold Anderson’s book points out the great loss in human potential for creative development that takes place between childhood and adulthood. Although this loss no doubt takes its toll by limiting the number of people who make creative contributions to our society, a much more serious and far-reaching consequence is that many adults never have the opportunity to experience the satisfaction and enjoyment that results from the act of creating. Somehow the joys that were associated with childhood fantasy and imaginary excursions into the world of the improbable seem to disappear as we engage in the business of growing up. Although growing up is indeed a serious business, I often wonder if the emphasis that our culture places on the practical and the utilitarian causes most people to arrive at adulthood without the creative ability that they possessed as children.

The first cartoon illustrates the emphasis that our educational system places on the process of conformity. Most learning experiences are designed in a way that causes all youngsters to arrive at the same solutions to problems; thus it is not surprising to see a very homogenized group emerging from “the system.” A quick glance at most workbooks or exercises in textbooks reveals that only rarely do these materials purposefully encourage youngsters to be as original as possible in their answers to given problems and questions.

The second cartoon presents a sad but essentially valid picture of most children’s perception of school. Our preoccupation with order, control, routine, and conformity has made schools into dreary and often oppressive places for many children. The supposedly exciting act of learning has frequently been a coercive and sometimes even punitive process.

Many writers have summarized problems that have made schools such unfriendly places and have pointed out some of the ways that these problems can be overcome. One suggestion common to many writers is that classrooms need to be more engaging, creative, and interactive places and that youngsters need to be given greater opportunities to imagine, create, and express themselves.

The creativity training program described in this manual represents one attempt to provide both teachers and students with a set of materials that will help them learn a variety of ways for expressing their creative potential. Creativity is a dynamic process that involves “a way of looking at things”; therefore the activities included in this program are designed to broaden the way that youngsters look at their world. The program is not an end in itself, but rather a series of first steps that will provide teachers and students with the basic skills involved in creative production. Over the past few years, I have worked with hundreds of teachers in courses and workshops dealing with creativity. These experiences have shown me that a minimum amount of instruction and a maximum amount of actual involvement with the materials have effected the biggest changes in teachers’ understanding and application of creativity training activities. The old saying “The best way to learn how to do it is to do it” is a guiding principle in my approach to teaching teachers the skills of creative production. Once these skills have been assimilated, they can be applied to all areas of the curriculum and to most of the learning experiences that take place in the classroom.

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PART I

I hear, and I forget;
I see, and I remember;
I do, and I understand.
Chinese Proverb

PURPOSE AND DESCRIPTION OF THE PROGRAM

The New Directions in Creativity program consists of five volumes: Mark A, Mark B, Mark 1, Mark 2, and Mark 3. The program is designed to help teachers develop the creative thinking abilities of primary and middle-grade youngsters. Research has shown that almost all children have the potential to think creatively and that creative production can be improved by providing systematic learning experiences that foster use of imagination.

Purpose of the Program

The general purpose of this creativity training program can best be explained by contrasting the creative or divergent production abilities with the convergent production abilities emphasized in most elementary school classrooms. In most traditional teaching-learning situations, major emphasis is placed on locating or converging upon correct answers. Teachers raise questions and present problems with a predetermined response in mind, and student performance is usually evaluated in terms of the correctness of a particular answer and the speed and accuracy with which youngsters respond to verbal or written exercises. Thus the types of problems raised by the teacher or textbook and the system of rewards used to evaluate student progress cause most youngsters to develop a learning style that is oriented toward zeroing in on the “right” answer as quickly and as efficiently as possible. Although this ability has its place in the overall development of the learner, most teachers would agree that impressionable young minds also need opportunities to develop their rare and precious creative thinking abilities.

Divergent production is a kind of thinking that is characterized by breaking away from conventional restrictions on thinking and letting one’s mind flow across a broad range of ideas and possible solutions to a problem. The real problems humanity confronts do not have the kinds of predetermined or “pat” answers that a great deal of instruction focuses on in the convergent-oriented classrooms. Yet we give our children very few opportunities to practice letting their minds range far and wide over a broad spectrum of solutions. The philosopher Alan Watts (1964) has talked about these two kinds of thinking in terms of what he calls the “spotlight mind” and the “floodlight mind.” The spotlight mind focuses on a clearly defined area and cannot see the many alternative possibilities or solutions to a problem that may exist outside that area. Floodlight thinking, on the other hand, reaches upward and outward without clearly defined borders or limitations. The floodlight thinker is free to let his or her imagination wander without the confinements or limitations that usually lead to conformity. Both types of thinking are valuable, and to pursue one at the expense of the other is clearly a disservice to the children for whose development we are responsible.

This description of divergent thinking should not lead teachers to believe it is undisciplined or disorderly. Mary Nicol Meeker (1969) has pointed out that “divergent generation does not proceed willy-nilly; the divergent thinker is not a scatterbrain; the worthwhile generation of information requires discipline and guidance.” Following Meeker’s suggestion, the New Directions in Creativity program has attempted to provide youngsters with an opportunity to break away from conventional restrictions on their thinking. Yet an effort has been made to generate responses that are relevant to particular kinds of problems and that fall within reasonable bounds.

Specific Abilities Developed by the Program

The New Directions in Creativity program is designed to develop each of the following creative thinking abilities:

1. Fluency—the ability to generate a ready flow of ideas, possibilities, consequences, and objects

2. Flexibility—the ability to use many different approaches or strategies in solving a problem; the
willingness to change direction and modify given information

3. *Originality*—the ability to produce clever, unique, and unusual responses

4. *Elaboration*—the ability to expand, develop, particularize, and embellish one’s ideas, stories, and illustrations

Each activity in the program is designed to promote one or more of these four general abilities. The activities are also classified according to (1) the types of information involved in each exercise (semantic, symbolic, figural) and (2) the ways that information is organized in each exercise (units, classes, relations, systems, transformations, implications, elaborations). These two dimensions are described in detail in Part III of this manual. The activity-by-activity lesson guides presented in Part IV include the specific objectives for each activity and suggestions for follow-up activities designed to develop further the specific abilities toward which the respective exercises are directed. Although many of the objectives and suggestions for follow-up activity are directed toward the development of traditional skills in language arts, these skills are always “piggybacked” on the four major creative thinking skills. Field testing has shown that students are more motivated to pursue traditional language arts skills when such skills are based upon activities that make use of their own creative products.

Although the purpose of each manual in this program is to provide teachers with a systematic set of activities aimed at promoting creativity in children, a second and equally important objective is to help teachers unlock their own potential for more creative teaching. In almost every school where these activities were field tested, participating teachers began to develop their own materials and activities for creativity training. In many cases, the teacher-made activities were highly original and skillfully integrated with various aspects of the regular curriculum. Once teachers understood the general nature of the creative process, they were quickly able to apply the same basic strategies to other areas of the curriculum. Therefore, teachers should view this creativity training program as a starting point that will eventually lead to the development of a “creativity orientation” on the part of teachers. This orientation will assist teachers in finding numerous opportunities for creativity training in a wide variety of learning situations.

**Description of the Program**

Each manual in the *New Directions in Creativity* program consists of twenty-four types of creativity training activities. Two activity sheets, both containing one or more exercises, are provided for each type of activity, and each type is classified according to the kinds of information involved in the exercises and the ways that information is organized. Each activity is further classified according to the level of response required. This classification scheme is based on Guilford’s model of the structure of human abilities. Teachers who wish to know more about this model should refer to Part III of this manual. (An overview of the activities in this manual, listing the types of activities according to Guilford’s classification scheme appears on page 22.)

*Mark A* and *Mark B*: Most of the activities in the primary volumes have been designed so that children can respond with either words or pictures. This approach allows children who cannot yet express themselves in writing to communicate their creative ideas through pictures. Suggestions for alternative modes of expression, such as dictating responses to a teacher’s aid or to a tape recorder are also included. The primary volumes are also designed to develop the psychomotor abilities of younger children through manipulative and dramatic activities, and the teaching suggestions present ideas for using primary teaching aids such as flannel boards, chart paper, scissors, and paste.

The format of the primary activities attempts to take account of the developmental level of the young child. Illustrations on the exercise sheets are generally larger and less complicated than the drawings in the middle-grade books, and fewer responses are required to allow for the gross motor coordination of the primary-aged youngster. Page directions are simpler, and greater reliance is placed on illustrations than on written directions. The lesson guides for the primary volumes contain more detailed suggestions for introducing activities and emphasize using concrete examples to get children started on exercises that are more easily demonstrated than described.

*Mark 1, Mark 2, and Mark 3*: Most of the activities in the middle-grade volumes deal with semantic information. Some symbolic activities that involve the use of words have been included, and a few figural activities have also been included to help students understand that creativity skills can be applied to both verbal and nonverbal information.

Activities dealing with information that is organized into units, classes, or relations generally require
students to (1) fill in blanks with unspecified words, (2) manipulate given words and figures, or (3) complete short statements. These activities are considered warm-ups for higher level activities, and they are generally directed toward giving students practice in the basic creativity skill of brainstorming. Brainstorming activities help students free their thinking processes from the restraints that usually hinder creativity and provide an effective means for promoting a free and open classroom atmosphere.

The higher level activities deal with information that is organized into systems, transformations, implications, or elaborations. The major difference between the two levels of activities is that fewer specifications are given for the kinds of responses required in the higher level activities. These responses are generally more open-ended, and fewer restrictions are placed on the nature of the products developed by students. Although all activities provide youngsters with opportunities to express themselves in a relatively free and unrestricted manner, the program will be most effective if students pursue a balanced combination of the various types of activities. Each type is designed to develop and give practice in the use of certain creativity skills, and the skills developed by the warm-up activities are necessary for maximum development of the more advanced kinds of creative thinking necessary for the higher level activities. Suggestions for the most effective sequencing of activities are included in Part II of this manual.

Grade and Ability Levels

Although no specific grade level has been assigned to the respective volumes, field tests have shown that Mark A is most successful with children in kindergarten and first grade and that Mark B works best with second- and third-grade youngsters. An attempt was made to separate activities in the primary volumes so that the first book would contain exercises for children who have not yet developed reading and writing abilities or who are in the beginning stages of development in these areas. The exercises in Mark B were designed in accordance with the level of communication skills that typically are taught in second and third grades.

Field tests have shown that Mark 1, Mark 2, and Mark 3 are most successful with students in grades four through eight. The open-ended nature of creativity training activities has provided an opportunity to develop a truly nongraded program, and many of the exercises have been used successfully with students at several grade levels. When there are no “right” or “wrong” answers, each student sets his or her own level of response. The responses of bright youngsters are often characterized by higher degrees of fluency, flexibility, originality, and elaboration, but even the slowest child is able to respond in a way that is appropriate to his or her own developmental level. It may be necessary for teachers to read some of the directions to students and to supervise their work more closely until they catch on to the nature of the various tasks. To help both younger and slower students grasp the main idea, most of the introductory exercises include illustrative examples. These examples are useful in helping students who have some trouble reading the directions or getting started on some of the more difficult exercises. Most of the exercises are not too difficult for younger or slower students, but because of the open-ended nature of the exercises, teachers must carefully explain directions, and they may have to provide a few examples of their own in order to start students off on the right track.

An important feature of this creativity training program is that a youngster can respond to each activity in terms of his or her own background and experience. Because the program is not based on the student’s ability to recall factual information, each student can express his or her creativity by drawing on his or her own knowledge and experiences. Many writers have pointed out that the child’s own experiences and activities are the principal agents of his or her development and that no matter how “primitive” a child’s level of development, he or she can extend his or her mental abilities by probing, manipulating, and applying his or her own experiences to new kinds of materials and situations. This idea is one of the fundamental principles on which the constructivist learning is based, and field tests with the New Directions in Creativity program have shown that students from so-called disadvantaged backgrounds are able to use their own experiences to complete most of the activities in the program.

Insofar as individualized programming is concerned, it is important for teachers to carefully consider each child’s preferences. Some students may show a preference for semantic activities, whereas others may prefer to respond figuratively or symbolically. Similarly, certain children may like exercises with a less complicated response format (units, classes, relations), whereas others may show a preference for more complicated modes of expression such as poetry or story writing. The classification system which underlies the New Direction in Creativity program provides a unique opportunity for teachers to study children’s learning style preferences and to adapt accordingly. The program will be most successful if teachers respect children’s preferences and avoid forcing every child to complete every activity.
GENERAL STRATEGIES FOR USING THE PROGRAM

Although a great deal has been written about fostering creativity in the classroom, relatively few basic teaching strategies have been effective in encouraging creative development. This section of the manual will describe the basic strategies that teachers have found most helpful in using the *New Directions in Creativity* program. Although the materials have been designed to require minimum preparation time, the importance of the teacher’s role cannot be overemphasized. In describing the role of teachers in this regard, Starko (1995) emphasized the distinction between teaching for the development of creativity versus creative teaching. She concluded that effective teachers who develop students’ creative thinking know how to teach techniques that “facilitate creative thinking across disciplines and provide a classroom atmosphere that is supportive of creativity” (p. 17). Other studies, including a meta-analysis study by Rose & Lin (1984) and a research synthesis by Torrance (1987), indicate that creativity training is associated with increased creativity, involvement in creative activities, and positive feelings toward school.

**Brainstorming and the Fluency Principle**

In most cases, the first thought that comes to mind in seeking the solution to a difficult problem is seldom the most original idea. Therefore, *fluency*, defined as the ability to produce several ideas or possible solutions to a problem situation, is an important condition for creative production. The fluency principle, which underlies the development of this creativity training program, maintains that fluency is a necessary, though not sufficient, condition for originality. Although there are some cases on record of highly creative products that have resulted from sudden inspirations, research on creativity in both children and adults strongly supports the fluency principle. Studies by Archambault (1970), Paulus (1970), and Baer (1993) have shown that initial responses to a given problem tend to be the more common ones and that the greater the number of answers generated, the higher the probability of producing an original response (*original* in the sense that fewer students come up with that response). Therefore, a hypothetical curve of creativity for a given task or activity (see Figure 1) would show a gently sloping gradient with an increase in originality being related to an increase in the number of responses. For example, if we asked a group of students to list all of the utensils that people might use to eat with, their initial responses would no doubt include common utensils such as forks, spoons, and knives. But if we encouraged them to increase their lists by using their imaginations (“Suppose you didn’t have any forks or spoons. What could you use?”), students would begin to explore some possible alternatives. They might suggest such items as sharpened sticks, shells, and bottle caps. If we compared the lists of several youngsters, we would find that most of the initial answers are quite common—that most of the students have given the same responses. As the lists grow longer, we would find more divergence occurring, and the probability of a youngster’s producing an original response increases. In other words, quantity

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**Figure 1. Hypothetical curve of creativity.**
breeds quality, and research has shown that individuals who produce a large number of ideas are more likely to produce ideas that are more original.

Each manual in this program attempts to capitalize on the fluency principle by including a number of exercises that generate a large number of responses. In opposition to the techniques of convergent production discussed earlier, these exercises have no right answers. Rather, they are designed to encourage the student to produce a large quantity of responses, and, hopefully, practice in this mode of thinking will help free the learner from previously acquired habits which predispose him or her to rely mainly upon recall and convergent thinking.

The basic technique for increasing fluency of expression is called brainstorming. The first step in this process is to provide students with a problem that has many possible alternative solutions. Brainstorming can be carried out individually or in group sessions. During the early stages of a brainstorming activity, students should write or verbalize all thoughts and ideas that come to mind, no matter how silly, way-out, or wild the ideas may be. The best way to promote free-wheeling and offbeat thinking is to value quantity and withhold criticism and evaluation until students have exhausted their total supply of ideas related to a given problem. This principle, known as the principle of unevaluated practice, is further discussed in the section dealing with evaluation (pp. 10-12).

The following is a list of general questions (adapted from Arnold (1962)) that can be used to spur students’ thinking during brainstorming sessions:

**Other Uses**

- Can it be put to other uses as is?
- Can it be put to other uses if it is modified?

**Adaptation**

- What else is like it?
- What other ideas does it suggest?
- What could you copy?
- Whom could you imitate?

**Modification**

- What new twist can you make?
- Can you change the color, size, shape, motion, sound, form, odor?

**Magnification**

- What could you add?
- Can you add more time, strength, height, length, thickness, value?
- Can you duplicate or exaggerate it?

**Minification**

- Can you make it smaller, shorter, lighter, lower?
- Can you divide it up or omit certain parts?

**Substitution**

- Who else can do it?
- What can be used instead?
- Can you use other ingredients or materials?
- Can you use another source of power, another place, another process?
- Can you use another tone of voice?

**Rearrangement**

- Can you interchange parts?
- Can you use a different plan, pattern, or sequence?
- Can you change the schedule or rearrange cause and effect?

**Reversibility**

- Can you turn it backward or upside down?
- Can you reverse roles or do the opposite?

**Combination**

- Can you combine parts or ideas?
- Can you blend things together?
- Can you combine purposes?

These are only some of the questions that teachers and students can use to stimulate creative thinking during the brainstorming activities included in the program. Once students have learned the basic brainstorming technique, you should encourage students to approach each activity with an idea-finding frame of reference. The section “Introducing the Primary Activities” (pages 12-14) is especially designed to teach the brainstorming process through active involvement in both group and individual brainstorming activities. As a general rule, you should always encourage students to go as far as they can in completing the exercises on the activity...
sheets and the follow-up activities. Students may need to go beyond the spaces provided or you may need to extend time limits when youngsters are engaged in a highly productive activity. Keep in mind that brainstorming is a skill that grows through practice, and students will develop this skill if they know you place major value on the quantity rather than the quality of their responses.

**The Principle of Mild Competition**

Although a great deal has been written about the dangers of high-pressure competition in the classroom, research with various curricular materials has shown that *mild* competition is a positive nutrient in motivating students to become involved in learning activities. The use of simulation and learning games to promote learning is based on the finding that gamelike activity is one of the child’s preferred ways of learning. Several researchers have investigated the relationship between children’s play and creativity. For example, Li (1985) found significant gains in preschool children’s creativity after being exposed to play training. Mellou (1995) examined the literature on the relationship between dramatic play and creativity and concluded that most of the research supports a positive relationship between them, noting the alternative symbolic constructions and flexibility common to both. In a research synthesis on creativity processes in children that are predictive of adult creativity, Russ (1996) also concluded that the relationship between children’s play and creativity is strong.

We have made an attempt to capitalize on the motivational benefits of gamelike activity by suggesting that certain exercises be carried out under mildly competitive conditions. This approach will introduce an element of excitement into the program and give youngsters an opportunity to pursue classroom activities in their preferred manner of learning.

To avoid the dangers associated with high-pressure competition, you should use caution when employing the mildly competitive mode. You should observe the following general rules whenever you introduce competition into creativity training activities.

1. Group competition should be used rather than individual competition.

2. Grades or other material rewards should never be associated with competitive activities. Students will derive satisfaction from the competitiveness itself and the excitement of winning or trying to win.

3. Teams should continually be rearranged in a way that allows all youngsters an opportunity to be on a winning team.

There are several ways of arranging teams for competitive classroom activities—row against row, boys against girls, or everybody wearing a certain color on one team, to name a few. If some youngsters find it difficult to perform under competitive conditions or if some put undue pressure on others who slow the team down, it may be wise to ask these students to serve as moderators or scorekeepers because “you need their help.” A good way to help build up enthusiasm is to get involved in competitive activities on an equal basis with students. When you join a given team, the students will no doubt look to you for leadership, but you should try to be just another member of the team and avoid contributing more than a proportionate share of the responses. You will, of course, have to experiment to determine the best ways for operating in the mildly competitive mode. A good deal of the art of teaching is involved in knowing your students and in using classroom management procedures that are especially applicable to a given group.

A general strategy that you can use in follow-up discussions of the exercises is intergroup competition. Prior to assigning a particular exercise or after an exercise has been completed, divide the class into several small groups which can then compete with each other on the basis of (1) the greatest number of team responses and (2) the most original responses (i.e., responses that other teams did not think of). A team’s score would consist of one point for the total number of responses generated by all team members (including duplications) minus a given number of points for each response that appears on another team’s list. Slowly increasing the number of points deducted for responses that are common among teams will encourage the students to strive for originality, as well as quantity, of responses. Students might like to keep a score card on the bulletin board to record team progress. Competitive follow-up activity of this type is probably most appropriate for exercises that emphasize the quantity of responses rather than the production of a story or single product.

**The Principle of Cooperation**

Researchers have found that activities involving team collaboration help youngsters increase their creative productivity. You should allow students to work on some activities in pairs or in small groups,
and students should direct their efforts toward the production of group responses, as well as individual responses. Group activities provide an opportunity for youngsters to learn cooperation and the benefits of bringing several minds to bear on a particular problem. They also provide opportunities for you to develop leadership skills and help less creative youngsters experience success by working cooperatively with more highly creative individuals. Since you can use many of the activities for both individual and group work, it is important for you to review each activity sheet before using it with students. Field tests have shown that the classroom teacher is the best judge of the conditions under which the class works best, and therefore the activities have not been classified as individual or group activities.

The best way to maximize the effectiveness of the New Directions in Creativity program is to vary continually the strategies for using the activities in the classroom. You should use competitive and cooperative modes as alternatives to the individual mode and use students as a guide in selecting the approach for a given activity. Part IV of this manual includes activity-by-activity lesson guides and suggestions for alternative ways of using the activities and follow-up activities. You should, of course, employ your own creative teaching strategies and develop new strategies by combining, modifying, and adapting suggested approaches.

**Evaluation: The All-Important Classroom Atmosphere**

The success of any creativity training program depends on the amount of freedom and flexibility that exists in the classroom. The very nature of creativity requires that students be allowed to express their thoughts and ideas in a warm and open atmosphere. Teachers should encourage their students to play with ideas, laugh, and have fun without worrying about being graded and evaluated when they are engaged in creativity training activities. Rogers (1969) emphasized the importance of freedom from the threat of evaluation and asserted that creativity can be fostered by establishing psychological safety through the unconditional acceptance of each individual’s worth. When you encourage youngsters to express themselves in an uninhibited manner, it is extremely important that you also provide them with a climate that is free from external evaluation and the critical judgments so often associated with schoolwork. The importance of providing this free climate is supported by the research of Amabile (1996) and Lepper, Greene, and Nisbet (1973) who found that extrinsic motivation undermines students’ creativity, and Amabile identified factors of intrinsic motivation that impact students’ performance on creative tasks. Since no right answers are prescribed for this creativity training program, students have the opportunity to work in an open atmosphere without the constant threat of failure hanging over their heads.

The most effective way to open up the classroom atmosphere is to minimize formal evaluation and lead students in the direction of self-evaluation. In the real world, people often judge things in terms of self-satisfaction and the degree to which they, as individuals, like or dislike the things they do or the products they produce. The only way that we can teach students to become self-evaluators is to give them numerous opportunities to judge their own work and to modify their work when they are not satisfied with it. Thus, this program does not include a formal grading system, and the suggestions that follow are designed to help develop strategies for (1) valuing students’ original products and (2) teaching youngsters the techniques of self-assessment.

The principle of unevaluated practice simply means that judgment is deferred until the individual has had an opportunity to explore several possible answers or solutions to a given problem. The principle of deferred adjustment, first espoused by Osborn (1963), has consistently been shown to be an essential ingredient for creative thinking. Several researchers, such as Amabile (1985) and Baer (1993), have found evidence to support this claim. The main purpose of unevaluated practice is to free children from the fear of making mistakes.

Creating such an atmosphere in the classroom is far easier said than done, but there are some specific strategies that teachers can use to help promote an environment that is more supportive of creativity. The most important strategy is to be tolerant and respectful of children’s ideas, questions, and products. You should show interest, acceptance, and excitement toward student responses and avoid expressions of shock, surprise, annoyance, or disinterest. Above all, never laugh at or make light of a youngster’s responses and try to discourage teasing and laughter from other students. Healthy amusement and friendly competition will help promote a supportive atmosphere, but ridicule and scowls will have a negative effect. Each student must come to believe that his or her ideas are as valuable as the ideas of others.

One of the hardest things to control in the classroom is the spontaneous laughter that may arise when a student says something that is somewhat unusual. A good way to overcome this problem is to legitimatize
laughter by showing students that you also have some way-out ideas and that you do not mind if the students laugh when you express them. You will note that in the section “Introducing the Primary Activities” the teacher is asked to demonstrate use of a pogo stick. This activity has been found to be an extremely effective way to legitimatize laughter and show students that you are not afraid to express unusual ideas or actions. Whenever possible, participate in written and oral activities and set the pace by contributing your own unusual responses. Your contributions will help students realize that you are a human being and that you are not afraid to express yourself freely. Remember, you set the limits on student behavior. If you actually participate in creative activities, students will learn that you value creative behavior, and they will quickly begin to display their own creative thoughts.

Another strategy aimed at promoting an environment that encourages students to be creative involves the principle of rewarding desired types of responses. If you show generous praise for quantity and unusuality of responses, students will quickly recognize the types of behavior that you value and they will strive to achieve these types of behaviors.

You can increase creative production by combining the fluency principle with the reward principle and the principle of unevaluated practice. In follow-up discussions to the activities, you should praise individual responses and give generous praise to the sheer quantity of response. Remember that an increase in fluency will almost always result in a corresponding increase in originality. Consequently, you should develop a repertoire of fluency-producing, enthusiastic comments, such as “That’s really good. Can you think of a few more?” and “Let’s see who can come up with five more possible titles for Bill’s picture.” Don’t be afraid to make up a few new words (for example, “fantabulous,”“super-great”) to show your enthusiasm. Gently probing youngsters for more and more responses will help them develop a fluency set; and, hopefully, practice in this mode of thinking will carry over to other areas of learning and experience.

You should make every effort to avoid using phrases or expressions that are natural killers of creativity. Examples of such phrases include:

Don’t be silly.
Let’s be serious.
That’s ridiculous.
Quiet down.
The principal won’t like it.
Let’s be practical.

You should know better.
What’s the matter with you?
That’s the matter with you?
That’s not our problem.
We’ve tried that before.
That’s not part of your assignment.
That’s childish.
A good idea but . . .
It won’t work.
Don’t be so sloppy.

One of the underlying purposes of the New Directions in Creativity program is to help youngsters learn how to evaluate their own creative products. One of the great tragedies of traditional school instruction is that students almost always look to the teacher for evaluation and approval. By so doing, they fail to develop a system of internal self-evaluation. And yet, psychological studies have revealed that each person has a need to be his or her own primary evaluator. The nature of creativity is such that the individual produces something that is new, unique, or novel for him or her at a particular time. To break away from social pressure toward ordinary and common production, a person must place his or her own opinions and feelings above those of others. He or she must be satisfied with his or her products and feel that they express a part of his or her feeling, thoughts, and ideas.

One of the primary tasks for teachers using this program is to help youngsters learn how to make judgments about their own work. This task is undoubtedly one of the most difficult of teaching, but there are a few simple guides that you can use to help students evaluate their own work. When students look to you for judgment, you might ask:

What do you think about it?
Do you feel good about it?
Would you like to work on it some more?
Why do you like (or dislike) it?
What things (criteria) are important to you?
How would you compare it to the work you did last time?

Encourage students to compare their own products by ranking them and selecting the ones they like best. Students should learn that you respect their judgment and will not overrule that judgment by placing your evaluation above their own. This behavior does not mean that you should not comment and make suggestions, but students should understand that you are stating your opinion and there is no reason to assume that it is more important than theirs. Since there are no right
answers to creativity exercises, and since students will not be graded on their creativity or creative products, the program provides a real opportunity for students to develop self-evaluation techniques. The key word in this process is _trust_. If students think that you will consider their creative activities in their final grades, they will constantly look to you as the ultimate source of judgment.

Peer evaluation can also provide students with a source of feedback. This feedback should always be informal, and it should be related to the type of product involved. For example, in writing a humorous ending for an unfinished story activity, if a student elicits laughter from the class, he or she will know that his or her efforts have been effective. You should encourage students to add their own praise to other children’s responses, and their spontaneous reactions should be a regular part of all follow-up discussions.

A final consideration in the creation of a free and open classroom atmosphere is the acceptance of humor and playfulness. When you purposefully ask youngsters to strive for clever and unusual responses, a good deal of healthy noise and whimsical behavior is likely to result. The creative adult has the same uninhibited expressiveness and spontaneity found in happy and secure children. Creativity time should be a fun time, and playfulness, impulsiveness, humor, and spontaneity are all part of having fun.

**How to Use the Primary Activities**

Although many of the primary activities are most effective when used with groups, they can also serve as independent studies or as supplementary classroom activities. Field tests have shown that the program can be used continuously for a given period of time or on a one- or two-day-a-week basis throughout the school year. The suggested follow-up activities are an important part of the program. Together with the activity sheets, they provide a year-long supply of creativity training exercises. As indicated in Part I, the program is not intended to be an end in itself. Rather, it is designed to assist teachers in learning the nature of creative problem solving and in developing their own creativity activities. The program will yield maximum benefits if you follow a plan that uses a balanced combination of activity sheets and suggested follow-up activities.

Because of variations in the needs of various age and ability groups and because of differences in individual and group preferences, the “Suggested Sequence for _Mark A Activities_” (p. 21) should not be considered a rigid lesson-by-lesson sequence. It is intended to serve as a broad guide, and you should feel free to modify the sequence to serve the individual interests and learning preferences of particular groups.

After students have become familiar with the various types of activities, you should give them opportunities to decide which activities they would like to pursue. Student interests should also guide you in determining which type of follow-up activities to use in future training sessions.

As students progress, you should encourage them to use the skills they have developed in previous activities. For example, you might introduce an unfinished story activity by suggesting the first sentence of a possible ending to the story and asking students to suggest synonyms for specific words that would make the sentence more precise, colorful, and imaginative. When students are working on advertising or promotion activities, you should make them aware of the use of homonyms and rhyming words in slogans and jingles and remind them of the rhyming exercises they completed earlier.

The general plan for sequencing primary activities takes account of (1) a balance between semantic, symbolic, and figural material, (2) a balance between units, classes, relations, systems, transformations, and implications and elaborations, and (3) the level of difficulty and logical relationships between certain activities. Since there are two activity sheets for each type of activity, you can work through the suggested sequence twice. In each set of exercises, comprehensive directions and sample responses (when applicable) are always included on the first activity sheet. Therefore, for any given exercise, you should always use the activity sheet lettered “a” before the activity sheet lettered “b.” By the time students get to the second activity sheet, they will have caught on to the nature of the exercise, and you can refresh their memory by referring to the first activity sheet. Occasionally, examples have been included on the second activity sheet to help provoke new ideas.

Each exercise should take approximately one class period, although some of the exercises that involve creative writing may require more time. You may want to assign for homework exercises that cannot be completed in class. However, it is necessary to have group discussions of all material that is completed outside of class as an important part of the creative process involves sharing creative products with others.

You can use the suggested follow-up activities included in the lesson guides any time after the students have completed the first activity sheet for each activity. Whenever students show a preference for a particular type of activity, capitalize on their enthusiasm by
developing similar activities of the type suggested in the follow-up sections of the lesson guides.

**Introducing the Primary Activities**

The basic strategy for introducing primary activities consists of freeing the classroom atmosphere from the usual constraints often associated with convergent production. Allow approximately one class period for the introductory session. It is extremely important for students to learn to appreciate questions and activities for which there are no right answers. You can introduce this concept by contrasting a convergent type of question with a divergent one. Before distributing the first activity sheet, you might say something like the following (but do not read it verbatim or sound too rehearsed):

Today we are going to begin practicing a new kind of thinking. This kind of thinking will help us learn how to explore many different kinds of solutions to a given problem. Some problems and questions have only one right answer, but there are also many problems and questions that have hundreds of possible answers.

Suppose I asked you, “In what year did Columbus discover America?” (Wait for an answer and write it on the chalkboard.)

Are there any other possible answers to this question? (General conclusion should be negative.)

Now suppose I were to ask you, “What are all of the possible ways that you might have come to school this morning?” (Call on youngsters and list responses on the chalkboard.)

Students will probably give some fairly common responses (“walk,” “bus,” “car,” “bicycle”). At this point, you might say:

Remember, I said all of the possible ways that you might have come. Use your imagination. Let your mind wander, even if you think the method for coming to school is silly or way-out. How about by donkey or pogo stick? (Add these to the list on the chalkboard.)

*This point is extremely crucial to introducing the creativity training program.* By suggesting the donkey and the pogo stick, you have accomplished three very important objectives. First, you have conveyed the idea that answers need not be feasible, practical, or realistic. Second, you have let youngsters know that you will accept these kinds of answers. Third and perhaps most important, you have let the youngsters know that you are capable of some way-out ideas. You can be emphasize this point by grabbing a yardstick (conveniently placed nearby beforehand) and improvising with a few hops to demonstrate a pogo stick. Students will no doubt become a little noisy, but it is very important to tolerate this reaction. If you hush them, the whole atmosphere of freedom will be lost, and they will subjectively think that this new kind of thinking is the same old game—the teacher questions and students answer.

After your examples, students may give a wide variety of answers. Let them call out their answers (rather than raising hands) as you write them on the chalkboard. Prompt students if necessary:

Any other animals that you might come to school on? How about an airplane or a rocket? Or being dropped from a plane with a parachute?

A second crucial factor at this point is the generous use of praise on your part. Enthusiastic comments such as “good,” “great,” and “fantastic” will help youngsters open up. Do not call on students who are not taking part. It takes some youngsters longer than others to trust the teacher and his or her classmates in this type of situation. The main idea is to let students know that you like what is going on and that you are having fun. When the flow of responses begins to slow down, say:

Let’s go one step farther. Suppose you could change your size or shape. Can you think of some other ways that you might possibly come to school?

If no one responds, say:

Could you make yourself very tiny and come in your brother’s lunch box? Or, could you change to a drop of water and come in through the drinking fountain?

Continue to fill the chalkboard as long as the youngsters are generating responses. When you finally call a halt, say:

I guess there really are many questions and problems that have several possible answers. Do you think this kind of thinking is fun?
From time to time, we are going to be working on some activities like the one we just did. The main purpose of these activities will be to practice answering questions and solving problems that have many possible answers. We will be using our imaginations to come up with some clever new ideas.

At this point, distribute the first activity sheet for “Thinking about Things” and read the directions in the manual to the students. If you have any doubts about youngsters’ understanding the directions, ask if there are any questions. Then ask the students to complete the first exercise.

After they have finished, allow some students to discuss their responses. Ask, “How many had that idea?” and after a few students have shared their entire lists, ask if anyone has any responses that have not yet been mentioned. Praise unusual responses from individuals, and praise the entire group for catching on.

Follow the same procedure for the second exercise. It is especially important to be tolerant of unusual responses, increased noise levels, and occasional bursts of laughter. A comment such as “Let’s be serious” could destroy the entire atmosphere of freedom to express oneself. If time permits, you may wish to pursue one of the follow-up activities suggested in the lesson guide.
RATIONALE UNDERLYING THE PROGRAM

The Need for Creativity Training Programs

Although interest in the identification and development of creativity has become one of the vital concerns of teachers, curriculum developers, and leaders in education, the actual effectiveness of schools in helping children realize their creative potential can be judged, at very best, as questionable. More than forty years of intensive research into the nature of creativity has yielded enough understanding about this dynamic process to enable educators to begin translating some of the research findings into classroom practice. The sad fact remains that in spite of dozens of books about creativity, hundreds of research studies, and thousands of training programs and workshops, the development of creative potential is still a largely ignored aspect of a child’s total repertoire of acquired behaviors. At least three major problems seem to account for the failure to translate existing knowledge and understanding about the creative process into meaningful classroom practice.

The first problem is a lack of agreement among educators about the definition of creativity and its distinctiveness from other cognitive behaviors. A great deal of research devoted to this issue has led to conflicting conceptions of creativity, such that Davis (1999) concluded, “There are about as many definitions, theories, and ideas about creativity as there are people who have set their opinions on paper” (p. 40). Despite different views, however, most theorists agree with at least two generalizations about creativity. First, several research studies have supported the threshold concept of creativity, namely, a low to moderate relationship between creativity and intelligence (Getzels & Jackson, 1962; Simonton, 1988; Walberg & Zeiser, 1997; Wallach & Kogan, 1965). Highly creative individuals have generally been found to be above average in intelligence, but high intelligence does not necessarily insure high creativity. In addition, a number of studies (Jaben (1980), for example) have found that children of all ability levels, including students with special needs, are capable of creative thinking. In summarizing this issue, Davis (1999) said, “It is absolutely true that despite genetic differences in our cognitive and affective gifts, everyone can become a more flexible, imaginative, and productive thinker” (p. ix). Thus, we can conclude that all children can benefit from systematic programming in this area.

The second generalization relating to defining creativity is that, rather than being an independent process, creativity consists of multidimensional processes involving interactions between the individual and his or her environment. These processes may differ from one another to such a degree that we must consider verbal creativity, creativity in problem solving, and creativity in the nonverbal arts as essentially different psychological phenomena. In other words, scientific creativity and creative problem solving may require different explanations than creativity in areas such as painting, music, and writing. And because of differences between individuals and their respective environments, what is a routine task for one person may very well be a creative experience for another. Since one of the basic assumptions underlying the development of the New Directions in Creativity program is that all people possess the ability to think creatively in varying degrees, the main purpose of the program is to assist youngsters in generating responses that are creative for the individual student at his or her present level of mental functioning. It is of course hoped that such experiences in creative thinking will help students develop a characteristic way of looking at things that will ultimately result in the creation of ideas and products that are truly original and useful for the culture at large. A good deal of research evidence that shows that people who have engaged in systematic creativity training exercises can increase their capacity for creative thinking in a variety of fields (Baer, 1996; Rose & Lin, 1984; Torrance, 1987).

Although this approach to the definition of creativity is relativistic rather than absolute, it is in
keeping with Guilford’s (1967) conception of divergent thinking (discussed on pages 16-19) and Torrance’s (1965) analytic description of the process which places creativity in the realm of daily living experiences rather than reserving it for the rarely achieved heights of creation:

I have tried to describe creative thinking as taking place in the process of sensing difficulties, problems, gaps in information, missing elements; making guesses or formulating hypotheses about these deficiencies; testing these guesses and possibly revising and retesting them; and finally in communicating the results. I like this definition because it describes such a natural process. Strong human needs appear to be at the basis of each of its stages. If we sense any incompleteness, something missing or out of place, tension is aroused. We are uncomfortable and want to do something to relieve the tension. As a result, we begin investigating, asking questions, manipulating things, making guesses, and the like. Until the guesses or hypotheses have been tested, modified, and retested, we are still uncomfortable. Then, even when this has been accomplished, the tension is usually unrelieved until we tell somebody what we have discovered. Throughout the process there is an element of responding constructively to existing or new situations, rather than merely adapting to them. (Torrance, 1965)

For the purposes of this program, creativity is defined as follows

Creativity is the production of an idea or product that is new, original, and satisfying to the creator or to someone else at a particular point in time, even if the idea or product has been previously discovered by someone else or if the idea or product will not be considered new, original, and satisfying at a later time or under different circumstances.

The second problem that has hampered efforts to promote creative thinking in the classroom has been the shortage of validated curriculum materials in this area. This shortage was the basis for one of the research challenges that emerged from the Sixth Utah Creativity Research Conference (Taylor and Williams, 1966), and was reemphasized in a study by Feldhusen, Bahlke, and Treffinger (1969). Among the many suggestions offered by theorists and researchers who have devoted attention to this problem has been a call for instructional materials that give youngsters practice in opening up their minds and using modes of thought that are not characteristically developed in traditional curricular materials. An overwhelming proportion of existing curricular material places major emphasis on the acquisition of factual information and a kind of thinking that focuses on locating the one right solution to a problem. Although these activities are valuable in the total development of the learner, they often dominate the curriculum and are usually pursued at the expense of other aspects of development. Thus the development of higher level thought processes such as creativity simply does not take place or is an accidental by-product of instruction.

The third major inhibitor to the development of creativity in children has been a lack of understanding about the nature of creativity on the part of many classroom teachers (Williams, 1964; Eberle, 1966; Guilford, 1967). In some cases, this lack of understanding has resulted in the severe inhibition of creative thinking in the classroom and even discrimination against students who display creative behavior.

Although the development of an effective program of teacher training is beyond the scope of this manual, Part II presents a number of practical suggestions for teaching strategies. These suggestions are not intended to serve as a substitute for a course or workshop in creativity, nor will they provide the teacher with the breadth of information that they could gained through extensive reading in this area. Rather, the main purpose is to call attention to the characteristics of creative teachers and to point out a number of widely accepted principles for rewarding creative behavior.

Each manual in the New Directions in Creativity program provides a set of experiences that are systematically and purposefully directed toward developing certain creative thinking abilities. The program is not offered as the only approach to this problem, nor is it maintained that the program will develop all of the many dimensions of creativity that seem to exist. Rather, it is one possible approach to creativity training that has been developed within a specified framework. This framework is described in the following section.

The Structure of the Intellect Model

The New Directions in Creativity program represents an attempt to translate one aspect of Guilford’s Structure of the Intellect Model (1967) of human abilities into classroom practice. This model, developed through factor-analytic methods at the University of Southern California Psychological Laboratory, has been viewed
by many educators as a potentially powerful tool for bringing about needed changes in the curriculum. Although the program focuses on only one dimension of the model, a brief overview of the entire system will provide teachers with the necessary frame of reference for understanding the approach used in this curriculum package.

The Structure of the Intellect Model (see Figure 2) is a three-dimensional classification system that is designed to encompass and organize 120 possible abilities according to (1) the types of mental operations employed in the act of thinking, (2) the types of contents involved in the thinking process, and (3) the types of products that result from the act of thinking.

(1) Operations

The operation dimension of Guilford’s model consists of five major types of intellectual activities or processes of mind—the things that the organism does with the raw materials of information. These five categories represent the mental operations that we as human beings can learn to use in processing the information with which we come into contact as we go about living and learning.

Cognition is the mental process involving immediate discovery, awareness, rediscovery, or recognition of information in various forms. Understanding and comprehension are terms that are commonly used to describe the act of cognition.

Memory is the process that deals with the retention or storage of information. It is accompanied by an ability to bring the information out of storage in response to cues or stimuli that bear some relationship to the stimuli presented when the information was originally stored.

Convergent production is the process of generating information from given information, where the emphasis is on achieving the conventionally accepted outcome. It is quite likely that the given information (cue) fully determines the response. Convergent production involves finding the correct solution to a

Figure 2. Guilford’s Structure of the Intellect Model.

problem by manipulating given information rather than merely retrieving information from memory; however, both memory and cognition are involved in convergent production.

*Evaluation* is the mental operation that refers to reaching decisions or making judgments concerning the criterion satisfaction (correctness, suitability, adequacy, desirability, etc.) of information. This operation implies a sensitivity to error and a judgment of the relative nearness of things to points on a continuum or set of standards.

*Divergent production*, the operation upon which this creativity training program focuses, involves the generation of information from given information, but here the emphasis is on variety and quantity of output from the same source. This operation is most clearly involved in aptitudes of creative potential and will be discussed in greater detail later in this section.

(2) Contents

The content dimension consists of the following four broad classes of information that are discriminable by the organism:

*Figural content* consists of information in concrete form, as perceived or recalled in the form of images. The term *figural* implies some degree of organization or structuring. Different sense modalities may be involved, such as seeing, touching, hearing, and smelling. Content information does not represent anything but itself—that which is sensed and discriminated.

*Symbolic content* involves information in the form of signs that have no significance in and of themselves. Letters, numbers, musical notations, and other code elements are examples of symbolic content. Objects, figures, and shapes are also examples of this type of content.

*Semantic content* is information in the form of meanings to which words commonly become attached. Semantic material is the major element in verbal thinking and in verbal communication (writing and speaking).

*Behavioral content* consists of essentially nonverbal information that is involved in human interactions, such as the awareness of attitudes, needs, desires, moods, intentions, perceptions, and thoughts of other persons and of ourselves. The identification of abilities involving this type of content has not been as precisely defined as those abilities involved in figural, symbolic, and semantic content.

(3) Products

The product dimension of the Structure of the Intellect Model consists of the organization or form that information takes when it is processed by the human mind. The following six products, as defined by Guilford, are the result of interaction between our senses and the world around us:

*Units* are relatively segregated or circumscribed items of information that have singular character. For example, one chair would constitute a unit.

*Classes* are recognized sets of items of information grouped together by virtue of their common properties. Thus several chairs would form a class.

*Relations* are recognized connections between units of information based on variables or points of contact that apply to them. For example, a chair and a desk would constitute a relation.

*Systems* are organized or structured aggregates of items of information that are grouped together because of the interrelatedness or interaction of their respective parts. Systems are combinations of units, classes, and relations that have some total function. An example of this category is a “school system.”

*Transformations* are changes of various kinds of existing or known information. Transformations involve the redefinition or modification of existing ideas, products, or materials.

*Implications* and *elaborations* consist of extrapolations of information in the form of expectancies, predictions, known or suspected antecedents, commitments, or consequences. Asking questions, the answers to which should help people see a particular problem more clearly, suggests implications from known information.

The *New Directions in Creativity* program deals primarily with the divergent production operation of the Structure of the Intellect Model. Within this “slab” of the model, eight of the twenty-four factors have not yet been completely identified by Guilford (see Figure 3); thus only a few experimental activities have been developed in these areas. The program does, however,
include activities that sample all of the divergent production factors that involve semantics, as well as some selected activities that use symbolic and figural information. None of the exercises in the program are offered as “pure” exercises in the development of a given factor. For example, Guilford (1967) has stated that “memory storage” underlies all problem solving and creative production, and other researchers (Pollert et al., 1969) have found that memory abilities play an important role in divergent production. Guilford’s factor-analytic data also have shown that certain activities are related in varying degrees to more than one factor. Thus abilities from other areas such as cognition and memory are brought to bear on the operation of divergent production; and within the area of divergent production, certain abilities seem to act as contributory factors to the development of other abilities. For this reason, the classification of activities according to the Guilford structure is intended to point out the major focus of the respective activities in the program, but these classifications should not be interpreted to mean that other abilities are not involved in a given exercise.

The main purpose of this brief overview of Guilford’s Structure of the Intellect Model is to underscore the relationship between the focus on divergent production presented by the New Directions in Creativity program and the overall dimensions of the Guilford model. Teachers who are interested in delving further into the various dimensions of the model should refer to Guilford’s major work in this area, The Nature of Human Intelligence (1967). Another excellent interpretation of the model is presented in Meeker’s book entitled The Structure of Intellect: Its Interpretation and Uses (1969).

Figure 3. Factors in divergent production.
PART IV

No printed word nor spoken plea
Can teach young minds what men should be,
Nor all the books on all the shelves
But what the teachers are themselves.
Anonymous

LESSON GUIDES FOR MARK 3

The activities in this book are presented in the order indicated below. As noted earlier, this sequence is offered only as a suggestion, and you should feel free to alter this sequence to serve the interests and preferences of a particular class. The activity number has been printed in the upper left-hand margin of each activity sheet to help you keep the sheets in order after each use.

A schematic overview of these activities, based on Guilford’s classification system, is presented in Figure 4. For a description of this system, see pages 16-19.

As you use these activities in your class, you may find it helpful to keep a record to which you can refer when you use the activities with other classes. For your convenience, a chart for this purpose is provided on the first four duplicating masters at the back of this manual. This chart contains spaces for you to record the date a particular activity sheet was used and to make notes on the class reaction and on how you used the follow-up activities.

Suggested Sequence for Mark 3 Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Type of Activity</th>
<th>Activity</th>
<th>Type of Activity</th>
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<tbody>
<tr>
<td>1 Thinking about Things</td>
<td>Semantic Units</td>
<td>12 Figure Families</td>
<td>Figural Classes</td>
</tr>
<tr>
<td>2 Sames and Opposites</td>
<td>Semantic Relations</td>
<td>13 A Peck of Pickled Peppers</td>
<td>Semantic Systems</td>
</tr>
<tr>
<td>3 Way-out Words</td>
<td>Symbolic Relations</td>
<td>14 Planning</td>
<td>Semantic Elaborations</td>
</tr>
<tr>
<td>4 Changing Things</td>
<td>Semantic Transformations</td>
<td>15 Hide-a-Word</td>
<td>Symbolic Systems</td>
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<tr>
<td>5 Another Point of View</td>
<td>Semantic Elaborations</td>
<td>16 Words with Feeling</td>
<td>Semantic Classes</td>
</tr>
<tr>
<td>6 Say It with Symbols</td>
<td>Figural Relations</td>
<td>17 Haiku</td>
<td>Semantic Systems</td>
</tr>
<tr>
<td>7 Words with Many Meanings</td>
<td>Semantic Units</td>
<td>18 Make-a-Character</td>
<td>Figural Relations</td>
</tr>
<tr>
<td>8 Laughing with Limericks</td>
<td>Semantic Systems</td>
<td>19 The Headline Cutter</td>
<td>Semantic Units</td>
</tr>
<tr>
<td>9 Building Words</td>
<td>Symbolic Units</td>
<td>20 Sights, Sounds, and Smells</td>
<td>Semantic Transformations</td>
</tr>
<tr>
<td>10 Crunch, Munch</td>
<td>Semantic Relations</td>
<td>21 Word Families</td>
<td>Symbolic Classes</td>
</tr>
<tr>
<td>11 Talk Show</td>
<td>Semantic Implications</td>
<td>22 Can You Design It?</td>
<td>Figural Elaborations</td>
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<td>23 The Advertising Game</td>
<td>Semantic Transformations</td>
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<td>24 The Reason Why</td>
<td>Semantic Elaborations</td>
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<td>UNITS</td>
<td>CLASSES</td>
<td>RELATIONS</td>
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<td>Building Words</td>
<td>Words with feeling</td>
<td>Sames and Opposites</td>
<td>Laughing with Limericks</td>
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**Figure 4. Mark 3 Activities**
1 Thinking about Things

Type of Activity
Semantic Units
Objectives
To develop ideational fluency.
To develop the ability to group things according to a common attribute (disjunctive classes).
To be able to distinguish between conjunctive and disjunctive classes.

Teaching Suggestions
This activity works well when carried out under mildly competitive conditions. After students have acquired a knack for listing things (usually after one or two exercises), you can increase competition by setting a time limit for each exercise and by giving additional points for responses that do not appear on other students’ lists. Time limits should vary according to the age and ability levels of the group.

You should give students an opportunity to read some of their responses aloud in class. If they are scoring their responses under competitive conditions, a good deal of excitement and debate will probably ensue. Some of the more creative youngsters will no doubt produce debatable responses. Encourage children to explain why they think their responses are legitimate as it will help them develop the concept of logical organization and give you an opportunity to call their attention to the idiomatic use of language (for example, “a wooden-headed person”).

Follow-up Activities
- Most of the exercises in the “Thinking About Things” activities are based on disjunctive classes—that is, only one attribute or common characteristic has been specified. On the other hand, in one exercise, students are asked to list things that are soft, blue, and worn as clothing. Since this exercise requires responses that possess a combination of attributes, it is based on a conjunctive class. After students have completed all of the “Thinking about Things” exercises, ask if they can tell how one exercise differs from all of the others. Lead them to see the difference between single- and multiple-attribute classes.
- You can raise the level of challenge by increasing the number of common attributes required. For example, students may be asked to list things that are soft, blue, and worn as clothing. You can also develop exercises around events (well-known battles or discoveries) or products (brands of breakfast cereals or makes of automobiles). An exciting adaptation is to let the students specify the attributes and try them out on their classmates.

2 Sames and Opposites

Type of Activity
Semantic Relations
Objectives
To develop verbal fluency and flexibility.
To develop the ability to construct relationships that are appropriate in meaning to a given idea and convey the concepts of same and opposite.

Teaching Suggestions
You can use the “Sames and Opposites” activities to lay the groundwork for higher level activities designed to develop verbal originality and the use of imagery. Explain to students that writers make their work come alive by varying their language and that they can develop feelings and moods by selecting the best word from a number of possible alternatives. You might illustrate this point by writing the following sentence on the chalkboard: A group of ____________ singers performed at our school last week. You can insert several different words in the blank, each connoting a different kind of performance (for example, opera, rock, country and western, folk).

The number of possible responses to words in these activities varies, and students will probably be able to create long lists for some words and to give only a few responses for others. After students have completed as many blanks as they can, introduce them to the thesaurus and point out its value to writers.

This activity has been found to be successful when carried out under conditions of mild competition (either individual or team). Allow sufficient time for students to discuss whether or not a given word or phrase is really the same as, or opposite of, one of the words specified in the exercises. Encourage them to use the dictionary as an arbitrator whenever opinions differ.

Follow-up Activities
- Antonyms are much more difficult to construct than synonyms. More able students might enjoy
working on additional exercises asking them to think of opposites.

- In addition to preparing similar exercises based on the “Sames and Opposites” format, you can ask students to write sentences that will convey various moods by substituting one word or phrase for another. This activity will help them appreciate word power, and you can use it as a lead-in to writing entire paragraphs that create a certain mood. You might introduce students to poems that are especially effective in creating certain moods by using carefully selected words. The poem “The Green Moth” by Winifred Welles creates a mysteriously beautiful mood about the nighttime Luna moth.

3 Way-out Words

Type of Activity
Symbolic Relations

Objective
To develop the ability to produce a symbolic relationship between the meanings of words and the way they are written.

Teaching Suggestions

Before distributing the activity sheets, write the word *divide* on the chalkboard and ask, “How can I make the word *divide* look like *divide*?” If students do not get the idea, erase through the middle of the word so that it looks like this: *divide*. Ask students if they can think of any other words that look like their meanings and have students write these words on the chalkboard. When students begin these exercises, make sure they have access to colored pencils or crayons.

After students have completed their activity sheets, ask them to reproduce their responses on the chalkboard. As you review the responses with the group, ask, “Did anyone write this word differently from the way it is written on the board?” Make sure that all major variations of each word are reproduced on the chalkboard and let the group decide which variation they like best. You may want to reserve a section of a bulletin board for students to display their original versions of “Way-out Words.”

Follow-up Activities

- Invite students to compile lists of words to use in additional activities of this type.

4 Changing Things

Type of Activity
Semantic Transformations

Objectives
To develop ideational fluency.
To give practice in brainstorming.

Teaching Suggestions

To introduce this activity, call attention to items that are functional and designed to appeal to the eye (e.g., automobiles, toasters, furniture). To help students understand the difference between works of art and products that have been beautified for aesthetic rather than functional reasons, ask students if a modernistic design of a clock makes it any more useful.

After students have completed the exercises, invite students to read aloud some of their lists and suggested changes. Give special praise to unusual items and to ideas that are unique in the group. Ask students to draw upon their own experience in explaining why they would like to have certain things made more attractive or durable.

Follow-up Activities

- You can develop similar activities around other possible modifications. For example, things can be made softer, quieter, safer, or less expensive. Ask students to set the specifications and try them out on their classmates. You can also ask students to suggest functional or aesthetic changes in other common objects, such as telephones, bicycles, playgrounds, highways, and eating utensils.

5 Another Point of View

Type of Activity
Semantic Elaborations

Objectives
To develop the technique of personification by elaborating upon given information.
To develop imagination and creative writing skills.

Teaching Suggestions

This activity provides students with an opportunity to extend their imaginations by identifying both physically and emotionally with nonhuman creatures.
The activity will be most successful if an appropriate classroom climate is created prior to beginning the exercises. To achieve such a climate, ask students if they have ever visited a zoo and observed animals in a cage. Then ask them how they think the animals feel about being put in cages so that people can look at them and what the animals might say if they could talk. It might be worthwhile for pairs of students to play the parts of an animal and a visitor at the zoo and make up an imaginary conversation between them.

After students have completed each exercise, ask them to share their responses with the group or with a partner. You might ask other students to close their eyes and see if they feel as though a wolf or a mouse were actually telling the story. Early attempts at personification are likely to be awkward; therefore encourage students to revise their stories after they have had an opportunity to receive feedback from their partners or classmates. It is important to emphasize that there are no predetermined ways of completing these exercises and that every student should try to reflect his or her own personal feelings.

**Follow-up Activities**

- In addition to writing stories based on other animals, students can attempt to personify nonliving things such as clocks, baseballs, and automobiles. An interesting variation is to ask students to write stories entitled “If I Could Talk, What Stories I Could Tell” using as characters such inanimate but historically significant objects as Benjamin Franklin’s kite, the Colosseum in Rome, or Amelia Aerhart’s airplane. Introduce students who are especially interested in this type of writing to outstanding examples of personification such as Robert Lawson’s *Ben and Me*, the story of Benjamin Franklin as told by his friend Amos, the mouse.

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### 6 Say It with Symbols

**Type of Activity**

Figural Relations

**Objectives**

To develop the ability to produce relations between figures and given ideas.

To show symbolism in figural information that is based on given requirements.

**Teaching Suggestions**

Ask students to look at the illustrations on the first activity sheet and to speculate about the messages they intend to convey (open drawbridge, falling rocks). Point out the essential characteristics of a good symbol (instant and unambiguous recognition of what is represented by the figure). Ask the students if they can think of other common symbols that are encountered in our society (symbols on weather maps; commercial and safety symbols; and political symbols, such as the donkey, elephant, American eagle, British Lion, and so on). The key to creative productivity in this activity is in helping students understand that they can make their drawings symbolic as well as realistic. Unless you emphasize this concept, many of the responses will be rather obvious. If students dwell on the obvious in their drawings, suggest that for each symbol they make a second drawing that is completely different from their first.

Allow students to use crayons or colored pencils when completing their drawings and display them on a bulletin board. When discussing the content of students’ drawings, ask them to explain the meaning of any symbol or part of a symbol that is not immediately obvious. This activity helps develop peer evaluation. Let the students decide which drawings they like best and encourage them to re-create their symbols if they have picked up any good ideas from their classmates.

**Follow-up Activities**

- In addition to creating new highway and recreation symbols, students may want to develop their own sets of symbols to send secret messages. You can obtain a listing of international highway symbols from travel agencies or automobile clubs, and several books on the origin of language have sections that deal with early forms of symbol writing.

**Resources**


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### 7 Words with Many Meanings

**Type of Activity**

Semantic Units

**Objective**

To develop the ability to produce a variety of contextual meanings for given words.
Teaching Suggestions

To introduce this activity, write the word subject on the chalkboard and ask a student to use the word in a sentence. Record the sentence on the chalkboard and then ask if anyone can think of another sentence that brings out an entirely different meaning of the word subject. Continue this process until students have identified the following meanings: subject of a sentence, a king’s subjects, subject to colds, a school subject, subject for a composition. (An additional meaning can be added if the word is accented on the second syllable as in “subjected to torture.”) Although this word has a number of different meanings, students will quickly realize that the intended meaning of a word is usually revealed by the way the word is used in a sentence.

After students have completed the exercises, ask them to read their responses aloud. Call attention to meanings that are relatively unique in the group. For example, the word strike is sometimes used to indicate that a fish has attacked a baited hook, and run may be used in contexts such as “a run of good luck” and “a run in a stocking.”

Follow-up Activities

• Encourage students to develop their own lists of words for additional activities of this type. In order to make the activity sufficiently challenging, students should identify at least three different meanings for each word included on their lists. Invite more able students to develop four-meaning or five-meaning word lists. In addition, you can ask students to rewrite their sentences using synonyms or synonymous phrases for the words with many meanings.

8 Laughing with Limericks

Type of Activity

Semantic Systems

Objectives

To develop the ability to organize words into meaningful ideas.
To create original limericks.

Teaching Suggestions

The limerick is a form of poetry that children enjoy because it appeals to their sense of humor. Early attempts at writing limericks are often awkward and frequently nonsensical. Therefore it is especially important for you to support students’ early attempts. As they continue practicing, both the meaning and the rhythm of their poems will improve.

Introduce this activity by having a student read the sample limerick aloud in class and calling attention to the rhyming pattern. Ask students what word they could use as the final word in the unfinished limerick. After students have completed each activity sheet, allow them to read their limericks aloud. Give special praise to limericks that have flawless rhythm and rhyme and that convey a meaningful message.

Follow-up Activities

• Encourage students to write original limericks to display on a bulletin board or include in a class newspaper or literary magazine. Students with artistic talent can work cooperatively with the writers to illustrate the humor in various limericks.

• Ask youngsters to write the first two lines of a limerick and exchange them with their classmates for completion.

9 Building Words

Type of Activity

Symbolic Units

Objectives

To develop verbal fluency by producing words that conform to given specifications.
To develop spelling and vocabulary skills.

Teaching Suggestions

Write the word script on the chalkboard and ask students how many words they can form that contain script but that do not begin or end with it (descriptive, subscription, prescriptive, transcription, etc.). Once students have caught on to the idea, invite them to see who can develop the longest lists and who can think of some words that no one else will have on his or her lists. If students have difficulty, you may want to let them work in small groups and use their dictionaries.

After students have completed each activity sheet, have them read the words to the class and praise both quantity of response and responses that are unique in the group. Encourage youngsters to check the spellings and meanings of their words and ask students to use some of the words in sentences.
Follow-up Activities

- Since some combinations of letters may have only very limited possibilities for word building, ask students to think of at least five possible answers for a given set of letters before they submit an exercise to their classmates.

- A variation of this activity is to ask students to see how many small words they can discover in a given larger word. For example, eight small words can be found in the word *amendment* (a, am, amen, amend, me, men, mend, end).

10 Crunch, Munch

*Type of Activity*
Semantic Relations

*Objectives*
To develop the ability to produce relationships between the meanings and sounds of words.
To develop word fluency.

*Teaching Suggestions*

This activity is based on the literary device of *onomatopoeia*, or the use of words to imitate sounds. You can introduce this activity by asking students to look at the three words given as examples in the first exercise and to think of some other words that describe a person eating potato chips. Lead them to discover the difference between onomatopoeic words and other words that describe eating, such as *bite, chew,* and *swallow*. Point out that words that imitate sounds are often “made-up” words that are not found in the dictionary and encourage them to invent some of their own words. Also point out that onomatopoeic words are sometimes used to highlight action in comic strips and ask students if they can think of some examples. (Comics about superheroes are a good source of examples.)

Students will no doubt have differences of opinion about whether certain words imitate sounds. You should let the group judge the degree to which words are onomatopoeic.

*Follow-up Activities*

- You can also carry out this activity in reverse—that is, you can ask students to list onomatopoeic words and then describe situations in which such words can be used.

- You might also ask students to draw action pictures that include onomatopoeic words or to place their drawings on the bulletin board and allow their classmates to list appropriate words beneath each picture.

- Introduce students who are especially interested in this type of activity to poetry that relies heavily on onomatopoeia. Edgar Allen Poe’s “The Bells” is a classic example. Other poems that use onomatopoeia include Longfellow’s “The Building of the Ship,” Masefield’s “Cargoes,” and Tennyson’s “Blow, Bugle, Blow” and “The Brook.” Invite students to write their own poems that make use of onomatopoeic words.

11 Talk Show

*Type of Activity*
Semantic Implications

*Objectives*
To develop the ability to produce antecedents based on given information.
To generate relevant and provocative questions relating to given situations.

*Teaching Suggestions*

Although curiosity is an almost universal characteristic of young minds, students are sometimes not given opportunities to develop the skills of expressing their natural inquisitiveness. This activity allows students to develop inquiry training skills and learn the distinction between questions that can be answered with a simple yes or no and questions that are of a more probing nature. When introducing this activity, emphasize the importance of asking insightful as well as factual questions and phrasing questions in a way that will elicit a great deal of information. Early questions are likely to deal with obvious material, and therefore it is important to encourage students to give three responses to each exercise.

After students have completed each exercise, ask them to read their questions aloud and allow the class to judge which questions they think are most effective. Since the responses of others will provoke new ideas, allow students an opportunity to formulate additional questions after they have heard their classmates’ questions.
Follow-up Activities

- If students are studying the lives of famous people, the activity can be staged as a simulated interview, with youngsters assuming the roles of famous individuals. Have them use tape and video recorders to record interviews for subsequent analysis and evaluation. (An interesting variation is to ask students to formulate questions for well-known cartoon characters such as Mickey Mouse or well-known animals such as Lassie.)

- Encourage students who show a special interest in this type of activity to study the way that questions are phrased on television talk shows such as *Face the Nation* and *Meet the Press*.

12 Figure Families

Type of Activity

Figural Classes

Objectives

To develop the ability to classify figural information in a variety of ways.
To develop flexibility in viewing figural information.

Teaching Suggestions

Introduce this activity by writing the letters *R, D, L, F, O,* and *C* on the chalkboard. Ask students if they can form subgroups of these letters, each of which makes a class according to similar figural characteristics. They will probably recognize such groups as *RDO* (enclosed space), *LF* (horizontal lines), and *RDOC* (curved lines). Be sure to point out that each letter can belong to more than one group. After students have listed several groups on the chalkboard, you might ask what other letters could be added to each of the categories.

Although there are a limited number of categories that you can create with any given set of figural information, “Figure Families” will allow students to explore various ways in which information can be categorized. Youngsters will quickly recognize some of the more obvious categories, but you should encourage them to look for the subtle characteristics that the figures have in common. Any common feature that a student can justify should be accepted.

This activity might provoke some interesting discussions in class. For example, some students may object to classifying the kangaroo (Figure G on the second activity sheet) as having four feet. There may also be disagreement about whether a purse (Figure F) can be classified as wearing apparel. However, it is important to let students resolve their own differences. Help them along with questions such as “What is the difference between wearing apparel and accessories? Is one a subcategory of the other?” Some of the more able students will be challenged by these questions, and you should encourage them to do some research on the meanings of the words that they use as categories.

Follow-up Activities

- Objects and figural material can be grouped according to a variety of physical properties, such as size, shape, color, texture, flexibility, and type of material (wood, plastic, glass, etc.). A good way to help students practice their classification skills using nonverbal material is to fill a box with all sorts of odds and ends (straws, bottle caps, rubber bands, chalk, etc.) and allow each student to spend some time studying the materials and creating categories. After all students have examined the box of materials, ask them to compare lists to see who developed the most categories. Students can also prepare their own boxes of materials and exchange them with their classmates.

13 A Peck of Pickled Peppers

Type of Activity

Semantic Systems

Objective

To develop the ability to organize words according to initial sound patterns.

Teaching Suggestions

You can introduce this activity by having a student read aloud the poem on the first activity sheet and calling attention to the author’s use of alliteration. Point out how the repetition of the initial b sound gives rhythm to the poem. Ask students if they can think of other examples of alliteration that they have encountered in their reading or in their daily speech habits. Expressions such as “bottom of the barrel,” “dirty dog,” “double dealing,” and “wild west” are examples of rhythmical patterns in everyday speech. Tongue twisters are also good examples of alliteration, and you may want to ask students if they would like to recite some familiar tongue twisters such as “Peter Piper picked a peck of pickled peppers.”
Students may have some difficulty getting started on this activity if they think that the alliterated sounds must be the same as the initial sounds of the topics. Point out the second example for *submarine* and emphasize that any beginning sound can be used regardless of the beginning sound of a given topic (i.e., the topic is *submarine* but the alliterated sound is *b*).

After students have completed each activity sheet, ask them to read their sentences aloud. Allow the group to judge which sounds give force and strength to the sentences.

**Follow-up Activities**

- Ask students to watch for good examples of alliteration in their reading and everyday speech and recording these examples in a reserved section in their notebooks.

- Encourage students who display an interest in this activity to explore poetry that is especially alliterative and, of course, to try their hand at writing poetry that uses this technique.

**Resources**


**14 Planning**

*Type of Activity*

Semantic Elaborations

*Objectives*

To develop ideational fluency and flexibility.

To produce an original plan of operation that is based on minimal specifications.

*Teaching Suggestions*

This activity allows youngsters to practice brainstorming skills and develop an organized plan based on one or more of the ideas produced in brainstorming. Although planning and organizing are extremely important abilities, most of the work that students do in school is planned for them by adults. Therefore, some students will find this activity difficult, and they may look to you for more guidance and direction than you should give. If students are to developed these abilities to the fullest, you should give some general suggestions, but the main responsibility rests with the students. General suggestions might be built around questions such as the following:

- What are the objectives of the project?
- How can the objectives be divided and clarified?
- What skills will be required?
- What jobs have to be done?
- Should some job be done before others?
- What materials and resources will be needed?

Encourage students to develop flow charts and time lines that present responsibilities, persons assigned to various jobs, and sequences of events.

After students have worked on their individual plans, you might divide them into small groups and suggest that they pool their ideas to produce a group plan. Let the class decide which plan would be the most effective.

**Follow-up Activities**

- In addition to developing other hypothetical planning situations, encourage students to apply their planning skills to both their individual work and any group projects that the class may undertake. Sometimes it is difficult for teachers to refrain from structuring activities, but if students are to develop planning abilities, they should be allowed to plan their own work whenever possible. The business sector and government have developed a number of planning and project management systems, and students who have an interest in, and aptitude for, this activity should be given an opportunity to study the area further. Unfortunately, most of the material in this area is too complicated for elementary-age youngsters. Nonetheless, you might help them interpret some of the material in a book such as *Program Evaluation and Review Technique (PERT)* by Desmond L. Cook (University Press of America, 1978).

**15 Hide-a-Word**

*Type of Activity*

Symbolic Systems

*Objectives*

To develop the ability to organize given symbolic information into different systematic arrangements.
To manipulate words so that they convey a meaningful message and, at the same time, meet predetermined symbolic specifications.

**Teaching Suggestions**

Introduce this activity by writing the following sentences on the chalkboard and asking students if they can find the names of two vegetables hidden in each sentence:

John said a picnic or nature walk would interest him because he wanted to be a naturalist.

John’s mother said, “All I’m asking is that you go to sleep early.”

If students’ initial efforts at hiding words in sentences are awkward, be sure to praise them for their early attempts and encourage them to make their sentences as meaningful as possible. After students have caught on, encourage them to break up the stimulus words in more than one way. After students have completed the exercises, they can exchange papers and attempt to identify the hidden words.

**Follow-up Activities**

- Ask students to create their own words and challenge others to discover them. Students who show a special talent for this type of activity might enjoy developing “Hide-a-Word” exercises that are built around a given theme, such as the names of fruits, trees, or animals.

**16 Words with Feeling**

**Type of Activity**

Semantic Classes

**Objectives**

To develop the ability to produce many categories of words and phrases appropriate in meaning to a given situation.
To develop verbal fluency and word association skills.

**Teaching Suggestions**

To introduce this activity, select a short paragraph that creates a certain mood and read it to the class. Ask students what words the author used to help create the mood in question. You can also ask students what words come to mind when they think of fear or excitement.

After students have completed each activity sheet, invite them to read individual words or phrases at random. Then ask the class to guess with which category the word or phrase is associated. The beginning words in each list are likely to be obvious associates of the situation in question. Therefore, it is important to encourage youngsters to generate at least five words or phrases for each situation. Ask students to explain words or phrases that are less obvious and generously praise responses that show clever or remote associations. Ask students if any of the responses that are read aloud could be used for more than one of the six situations in the exercise. Some debate is likely to ensue, and it is important to let the students themselves resolve their differences.

**Follow-up Activities**

- A natural follow-up to the “Words with Feeling” exercises is to ask students to write short paragraphs about each situation. This activity will help them synthesize their words and phrases and use them in a creative writing task. Invite youngsters who show an interest in this type of follow-up activity to write a short story based on one of the moods.
- Responses to this activity often deal with visual and auditory senses. You can help students expand their perception of mood-associated words by asking them to classify words according to one of the five senses with which they are associated. This activity will help students realize that moods can also be created by words that are associated with smell, taste, and touch.
- You can also ask youngsters to describe the sound effects they would use if they were developing a radio program designed to convey a given mood. Some students may actually want to create a sound effects tape for one or more of the situations listed on the activity sheets or other situations of their choice.

**17 Haiku**

**Type of Activity**

Semantic Systems

**Objectives**

To develop the ability to convey mood and feeling.
To create original haiku.
Teaching Suggestions

You may choose to introduce this activity by asking students to read the examples on each activity sheet aloud and suggesting that they underline each of the seventeen syllables in the poems. Although early attempts at writing haiku are likely to be awkward, praise students for their initial efforts and encourage them to revise their poems so that they conform to the 5-7-5 pattern of haiku.

As students gain experience in writing haiku, point out the simple picture-making description usually included in the early part of the poem and the statement of mood or feeling that follows. Since haiku usually focuses on direct (eyewitness) accounts, encourage students to draw on their own experience and observations of natural phenomena.

Follow-up Activities

- Allow students who express an interest in haiku to work together to stimulate ideas and assist each other in revising their poems. They may wish to make illustrated booklets or bulletin board displays of their haiku.

- Introduce interested students to some of the many books that contain haiku.

18 Make-a-Character

Type of Activity

Figural Relations

Objectives

To develop the ability to produce relationships between given figural information.
To develop imagination by producing and elaborating upon an original character.

Teaching Suggestions

Prior to introducing this activity, ask students to cut out and bring to class some of their favorite comic-strip characters from the daily newspaper. Discuss the characteristics of various expressions on these characters' faces (for example, serious, silly, sinister) and ask students how they think cartoonists achieve the desired effect in their characters.

Provide students with scissors and paste for this activity and encourage them to experiment with several combinations of facial parts before they prepare their final product. Some students may want to predetermine the type of character they wish to create, or they can simply manipulate the parts and let their characters evolve. After students have decided on the parts they would like to use for their characters, suggest that they use color and shading to elaborate upon the faces. Allow students to present their characters to the class and to read their stories aloud. You can use the final products for classroom decorations or display them on a bulletin board.

Follow-up Activities

- Allow students to work in groups, each contributing one part to form a composite face.

- Students can also prepare their own facial parts and exchange them with their classmates.

- Encourage students who are especially talented in this type of activity to prepare a comic strip series to display on a bulletin board or publish in a class or school newspaper.

19 The Headline Cutter

Type of Activity

Semantic Units

Objectives

To produce written communications that arouse curiosity and interest in specified material.
To develop ideational fluency based on a specified written communication.

Teaching Suggestions

Introduce this activity by showing several provocative headlines clipped from newspapers and asking the class to speculate about the articles that appear below the headlines. Emphasize the function that headlines perform in arousing the reader’s curiosity and invite students to think of alternative headlines for those that you have cut out of the newspaper. After they have speculated about a few articles, read a brief newspaper article and ask students to suggest some possible headlines. Record these on the chalkboard and allow students to judge which headlines they think would create the most interest in the article.

Follow-up Activities

- The daily newspaper can supply you with an unlimited number of headlines and articles to use
in this type of activity. You can mount brief articles on poster paper and place it on a bulletin board so that students can read the articles and record their suggested headlines above them.

- This activity provides an opportunity for you to call students’ attention to two additional functions of newspaper headlines. Some headlines are intended to summarize the information in the article so that readers can discern the main message of the article at a glance (“Red Sox Sweep Doubleheader from the Yankees”). Another function of a headline is to raise a question that will be answered in the article (“Will Mayor Seek Re-election to Third Term?”). Ask students to collect headlines that fall into each category. Then have them scramble the headlines and exchange them with their classmates for reclassification. Whenever differences in opinion occur, allow students to give reasons in support of their classification and make the final judgments.

- If your local newspaper has a person who is responsible for cutting headlines, you may want to invite him or her to speak to the class about how he or she decides on a headline.

20 Sights, Sounds, and Smells

Type of Activity
Semantic Transformations

Objectives
To develop the ability to identify and isolate the kinds of information obtained through the senses.
To transform separate pieces of information into an original descriptive paragraph.

Teaching Suggestions

Close observation is a primary requisite for descriptive writing, and it is important for students to appreciate the importance of the senses in receiving information that leads to description. Write the words Sight, Sound, Smell, Taste, and Touch across the chalkboard and ask what descriptive words students might list under each heading. Lead students to the conclusion that carefully selected words not only help describe things and situations, but also help create moods and feelings. For example, the words aroma and stench, both associated with the sense of smell, create two different attitudes.

After students have completed their descriptive paragraphs, have them read their paragraphs aloud. Then ask the class to judge whether the writer has made them feel as though they were on a busy city street or in a tropical jungle. Encourage students to revise and rewrite their descriptions, keeping in mind that the main objective is to make the reader feel as though he or she is experiencing the situation being described.

Follow-up Activities

- Follow-up activities can concentrate on one of the senses or on any combination of the five senses. Photographs and paintings provide good stimulus material for descriptive writing. You should also encourage students to include the senses of taste and touch in their descriptions. Students who enjoy descriptive writing can work cooperatively with youngsters who are talented in art. Provide students who are especially talented in this area of writing with exemplary pieces of descriptive writing and encourage them to expand their paragraphs into short stories.

21 Word Families

Type of Activity
Symbolic Classes

Objectives
To develop the ability to classify verbal information in a variety of ways.
To develop flexibility in viewing verbal information.

Teaching Suggestions

Write the following words across the chalkboard and ask students to think of ways in which the words can be grouped together according to common characteristics: book, take, cooking, sewed, looked, safe. Lead students to discover that words can be grouped according to meaning, sound, letter configuration, number of syllables, beginnings and endings, and parts of speech. Point out that some words will fit into several categories.

Although there are a limited number of categories that can be created with any given set of words, this activity allows youngsters to explore a variety of ways in which verbal information can be categorized. The activity can generate a good deal of enthusiasm when pursued under mildly competitive conditions. You should accept any common feature that a student can justify as a legitimate category and encourage students to resolve
their own differences of opinion when disagreements arise.

Follow-up Activities

- An unlimited number of activities can be patterned after the “Word Families” format, and students should take responsibility for producing lists of words to use in follow-up exercises. An interesting variation is to have students write each word on a slip of paper and then sort the slips into several small boxes, each of which is labeled to indicate a particular category. When students discover more than one category into which a word can be placed, they may write the word on another slip of paper.

22 Can You Design It?

Type of Activity
Figural Elaborations

Objectives
To develop nonverbal elaboration and originality.
To produce an organized plan that includes anticipated consequences arranged in unique ways.
To write a description that translates figural information into verbal information.

Teaching Suggestions

Before students begin this activity, ask them to brainstorm a list of things that they will want to include in their plan. If they have had some experience in scale drawing, you might suggest that they devise a scale for their drawings and use rulers to convert objects to a given scale.

After students have completed each exercise, have them develop a comprehensive list on the chalkboard of all the things that are included in everyone’s drawing. Use tally marks each time an object is repeated and call attention to objects that are relatively unique in the group.

Display students’ plans on the bulletin board and compare them with pictures and plans that might be available from magazines or actual blueprints. (Maps of parks and recreation areas are sometimes made available so that users can easily locate equipment and facilities. Ask youngsters who might visit national parks or recreation areas to look for such maps and descriptive literature.)

Follow-up Activities

- You can correlate language arts activities with this activity by asking students to write descriptions and specifications for their classroom and recreation area plans. Technical writing is a highly valuable skill which youngsters seldom get a chance to develop. Encourage students to be imaginative by reminding them that descriptive writing should create a mental image that accurately represents the object being described and, at the same time, makes the object sound attractive. You can use this follow-up activity with students who are especially interested in writing or with students who like to draw but are somewhat reluctant to write. For this latter group, emphasize the drawing, but use the figural work as a basis for getting them to do some writing about their drawings. This activity can serve as a lead-in or follow-up to “The Advertising Game.”

- Other design activities can be based on a variety of objects. Entire schools, rocket ships, houses, traffic systems, and various types of stores, banks, and zoos are some of the things that youngsters can design. For those who express an extreme interest in this area, you might want to obtain some blueprints or books on design and drafting and arrange for them to talk with an architect or draftsman.

Resources


23 The Advertising Game

Type of Activity
Semantic Transformations

Objectives
To develop verbal originality and elaboration.
To produce a clever and convincing communication that is directed toward a given purpose.

Teaching Suggestions

Before introducing this activity, you may want to bring in a variety of advertisements from newspapers and magazines. Ask students what they think the writers
of the advertisements did to attract the attention of readers. For example, they might appeal to particular age groups or use well-known persons or attractive models. In a similar fashion, analyze a few radio or television commercials and encourage youngsters to talk about their favorite commercials as well as those they dislike. Point out the efforts commercial writers make to excite potential buyers by using clever language and appeals to values that people consider important. Call attention to the use of humor in many television commercials, but also remind students that humor is only a device to attract attention.

Follow-up Activities

- In addition to writing advertisements and commercials for an almost unlimited variety of products, students can develop artistic and graphic skills by preparing advertisements for magazines and billboards. Allow them to judge each other’s work and to compare their work to professional advertisements. Lead them to discover the importance of balanced layouts, bold colors, and dynamic words.

- Dramatizing written scripts is a natural follow-up to this activity. If students show an interest and appear to be having fun, allow them to elaborate on their commercials by incorporating such things as musical background, makeup, costumes, and puppets. Students should use tape recorders (and video recorders, if available) for rehearsals and for recording the final production.

- In a somewhat more advanced version of “The Advertising Game,” students create ads or public service announcements that are directed toward popularizing certain noncommercial behaviors. Encouraging people to get health checkups, to stop smoking, to drive carefully, and to avoid polluting the environment are examples of public service announcements. Again, encourage students to use a variety of media to help them produce effective communications. Students could use some of the noncommercial presentations for school campaigns.

24 The Reason Why

Type of Activity

Semantic Elaborations

Objectives

To develop imagination through fanciful speculation.
To produce unique or clever antecedents based on given information.

Teaching Suggestions

To introduce this activity, discuss with students the fanciful and exaggerated exploits of folklore heroes such as Paul Bunyan and Pecos Bill. If students are not familiar with tall tales, it will be worthwhile to read one of these stories or one or two of Kipling’s Just-So Stories, such as “How the Leopard Got His Spots” or “How the Camel Got His Hump.” This activity may be somewhat difficult for students because they are usually asked to give logical explanations for natural phenomena. Therefore, it is necessary to encourage students to be as imaginative as possible in answering the questions. Ask them to read their responses aloud and allow the class to judge which explanations are the most imaginative.

Follow-up Activities

- In addition to making fanciful speculations about other natural phenomena and unusual events or situations, students can develop short stories that are similar in format to Kipling’s Just-So Stories. In fact, the best use of these exercises is as a lead-in to creative writing activities that encourage fanciful speculation. Students can illustrate stories, and you should encourage students with artistic talent to team up with other students who are especially interested in writing stories. Students can also dramatize and present outstanding stories to primary grade youngsters.


1 Thinking about Things (a)

When you are in a department store, have you ever noticed that all of the things of a certain type are grouped together? You will find all the men’s clothing in one section and all the women’s clothing in another. For some reason, people like to group things together according to certain characteristics that they have in common. In this activity, see how many things you can think of that have the same characteristics.

List all the things that you can think of that have four legs. A few examples are given to help you get started. If you need more space, continue your list on the back of this page.

- horses
- tables
- a pair of twins

List all the things you can think of that are made of wood. Use the back of this page if you need more space.

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1. **Thinking about Things (b)**

List all the things you can think of that are soft and blue. Use the back of this page if you need more space.

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List all the things you can think of that can be found in a school. Use the back of this page if you need more space.

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2  Sames and Opposites (a)

See how many words or phrases you can think of that mean the same or almost the same as the word at the top of each column. Use the back of this page if you need more space.

<table>
<thead>
<tr>
<th>acquire</th>
<th>funny</th>
<th>follow</th>
<th>drink</th>
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<tr>
<td>obtain</td>
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<td>pick up</td>
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<th>change</th>
<th>arise</th>
<th>bend</th>
<th>artist</th>
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See how many words or phrases you can think of that mean the opposite of the word at the top of each column.

<table>
<thead>
<tr>
<th>behind</th>
<th>wicked</th>
<th>cold</th>
<th>success</th>
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<td>ahead of</td>
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<tr>
<th>clean</th>
<th>wrong</th>
<th>low</th>
<th>trust</th>
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</table>

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2  Sames and Opposites  (b)

See how many words or phrases you can think of that mean the same or almost the same as the word at the top of each column. Use the back of this page if you need more space.

<table>
<thead>
<tr>
<th>assemble</th>
<th>barrier</th>
<th>spot</th>
<th>part</th>
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<th>boundary</th>
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<th>flight</th>
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</table>

See how many words or phrases you can think of that mean the opposite of the word at the top of each column.

<table>
<thead>
<tr>
<th>build</th>
<th>choose</th>
<th>hard</th>
<th>take</th>
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<tr>
<th>calm</th>
<th>square</th>
<th>enemy</th>
<th>slow</th>
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<tbody>
<tr>
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</table>
3  **Way-out Words (a)**

Words can sometimes be written in ways that make them look like their meanings. See if you can write each of the following words so that it will look like its meaning. An example of how the first word might be written is shown below.
3  Way-out Words (b)

See if you can write each of the following words so that it will look like its meaning.

square  peel  
question  fall  
slide  peek  
far  double
4 Changing Things (a)

Many things that serve a useful purpose in our daily lives are more appealing because they have been made more attractive or beautiful. For example, dishes have been beautifully designed and decorated so that they are attractive as well as useful. In the spaces below, list all the things you can think of that might be made more beautiful or attractive. Try to think of things that no one else has thought of. A few examples are given to help you get started. Use the back of this page if you need more space.

pencils

garbage cans

Select one of the things from your list and tell how you would go about making it more beautiful or attractive. Use the back of this page if you need more space. On a separate piece of paper, make a sketch of the thing you designed.

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4 Changing Things (b)

Many things are more useful to us because they have been made stronger or made to last longer. For example, the manufacturers of paper towels and aluminum foil try to make their products as strong as possible. In the spaces below, list all the things you can think of that would be more useful if they were made stronger or were made so that they would last longer. Use the back of this page if you need more space.

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Pretend that you have been asked by a toy manufacturing company to make any changes you wanted in their yo-yos so that they would be more fun to play with. What changes would you make? List your ideas in the space below. Use the back of this page if you need more space.

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5  **Another Point of View (a)**

Do you remember the story about the three little pigs? In that story, the wolf is depicted as a mean and evil character, but few people have ever told the story from the wolf's point of view. Imagine that you are the wolf in this story. Retell your story in a way that will let the reader understand how it feels to be the big bad wolf. A few lines are written to help you get started. Use the back of this page if you need more space.

The Three Little Pigs
by
I. M. A. Wolf

It's not easy being a big bad wolf. I don't have very many friends, and everybody runs away when they see me coming.

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5 Another Point of View (b)

What do you think the world looks like to a mouse? Would people look like giants and fish bowls like big aquariums? Imagine that you are a mouse and write a description of what the world looks like to you. Tell how it feels to see the world from a “mouse-eye view.” Use the back of this page if you need more space.

A Mouse-eye View

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6 Say It with Symbols (a)

The signs along our highways often use pictures or symbols to give directions to drivers. A good symbol should enable the driver to recognize its meaning instantly so that he or she knows what to do when he or she sees it. Imagine that you are a designer who has been asked to design a symbol for each message below. Draw your symbols in the spaces provided.

Bumpy Road

Narrow Bridge

Animal Crossing

Slippery Road
6 Say It with Symbols (b)

Pretend that you have been asked to design a symbol for each type of recreation listed below. Remember that a good symbol should enable people to recognize its meaning instantly. Draw your symbols in the spaces provided.

- Skiing
- Hunting
- Archery
- Snowmobiling
7  Words with Many Meanings  (a)

Some words in English have many meanings, but people can usually tell which meaning is intended by the way a word is used in a sentence. See how many different meanings you can think of for each word below, and for each meaning, write a sentence which reveals that meaning. A few examples are given to help you get started. Use the back of this page if you need more space.

strike
The count was two strikes and one ball.
The miners hope that they would strike gold.

hand

run

fire

Some words in English have many meanings, but people can usually tell which meaning is intended by the way a word is used in a sentence. See how many different meanings you can think of for each word below, and for each meaning, write a sentence which reveals that meaning. Use the back of this page if you need more space.

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8  Laughing with Limericks  (a)

A limerick is a five-line poem that usually tells a funny story. The second and fifth lines of a limerick rhyme with the first line, and the third and fourth lines rhyme with each other. The third and fourth lines are usually shorter than the other three lines. Read the following limerick and study the rhyming pattern.

A kindly young girl from Rangoon
On her guitar played a rock and roll tune.
    Her friends were all there
    And said, "What a pair!"
As she danced with a silly baboon.

Use the limerick rhyming pattern to complete the following poem.

There was an old woman named Gayle
Who caught a big fish by the tail
________________________________________________________________________
________________________________________________________________________
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In the space below, see if you can write an original limerick.
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________________________________________________________________________
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8  Laughing with Limericks (b)

Use the limerick rhyming pattern to complete the following poem.

One day I swam in the lake.
I picked up a stick by mistake.

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In the spaces below, see if you can write three original limericks.

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9 Building with Words (a)

See how many words you can form by adding parts to both the beginning and ending of each word or word part below. A few examples are given to help you get started. Use the back of this page if you need more space.

<table>
<thead>
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<th>form</th>
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</table>
See how many words you can form by adding parts to both the beginning and ending of each word or word part below. Use the back of this page if you need more space.

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Some of the words in English imitate sounds. Think about each sound listed below and then see if you can think of a few words that describe that sound. Don’t be afraid to make up some words of your own. A few examples are given to help you get started.

The sound of people eating potato chips

__________________________________________________________

__________________________________________________________

The sound of church bells ringing

__________________________________________________________

__________________________________________________________

The sound of logs burning in a fireplace

__________________________________________________________

__________________________________________________________

The sound of a typewriter in action

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__________________________________________________________

The sound of racing cars in a race

__________________________________________________________

__________________________________________________________
Some of the words in our language imitate sounds. Think about each sound listed below and then see if you can think of a few words that describe that sound. Don’t be afraid to make up some words of your own.

The sound of a thunderstorm
________________________________________________________________________
________________________________________________________________________

The sound of a jet plane taking off
________________________________________________________________________
________________________________________________________________________

The sound of two dogs fighting
________________________________________________________________________
________________________________________________________________________

The sound of wind blowing through the trees
________________________________________________________________________
________________________________________________________________________

The sound of a person walking through mud
________________________________________________________________________
________________________________________________________________________

The sound of glass breaking
________________________________________________________________________
________________________________________________________________________

The sound of water dripping from a faucet
________________________________________________________________________
11  **Talk Show (a)**

Did you ever wish that you could talk to a famous person? Imagine that you are an interviewer on a television talk show and that your job is to ask questions of the famous people listed below. Since you have time for only three questions for each person, it is important to ask questions that will provide the audience with interesting and useful information. List your questions in the spaces below. An example is given to help you get started.

**Neil Armstrong** (the first man to ever walk on the surface of the moon)

*What thoughts went through your mind as your spacecraft approached the moon?*

______________________________

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**Nina Kuscsik** (the first woman to win the Boston Marathon)

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**Harriet Tubman** (the leader of the Underground Railroad)

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11 Talk Show (b)

Imagine that you are an interviewer on a television talk show. If you could invite any guests, living or dead, to appear on your show, whom would you ask? Write your choices in the boxes below and then list three questions that you would ask each guest.

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12 Figure Families (a)

Study the figures below and group them together according to characteristics they have in common. See how many groups you can create. You can use each figure as many times as you wish. Some examples are given below.

Common characteristics

<table>
<thead>
<tr>
<th>letters</th>
<th>Arabic numerals</th>
</tr>
</thead>
<tbody>
<tr>
<td>O, I, M, S, C, A</td>
<td></td>
</tr>
<tr>
<td>0, 2, 5</td>
<td></td>
</tr>
</tbody>
</table>

Figures

- 0
- 2
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- .
- =
- M
- \(\sqrt{}\)
- ?
- two
- S
- C
- 5
- A
- $
12 Figure Families (b)

Study the figures below and see if you can group them together according to characteristics they have in common. You can use each figure as many times as you wish. An example is given below.

Common characteristics

<table>
<thead>
<tr>
<th>furry things</th>
<th>Figures</th>
</tr>
</thead>
<tbody>
<tr>
<td>G, N, O</td>
<td></td>
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</tbody>
</table>

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One of the favorite devices of writers is to repeat the same beginning sound in two or more words in a sentence. This technique is called *alliteration*. Read the following poem and note how the author has used alliteration.

Betty Botter bought some butter,  
But, she said, the butter’s bitter;  
If I put it in my batter  
It will make my batter bitter,  
But a bit of better butter  
Will make my batter better.  
So she bought a bit of butter  
Better than her bitter butter,  
And she put it in her batter  
and the batter was not bitter.  
So ‘twas better Betty Botter bought  
a bit of better butter.

For each topic below, see if you can write a sentence in which you use alliteration. A few examples are given to help you get started.

A submarine

The submarine silently slipped beneath the surface of the sea.
The big boat was blasted out of the water by the submarine.

A motorcycle

A frog

A moon
13  A Peck of Pickled Peppers  (b)

For each situation below, see if you can write a sentence in which you use alliteration.

A man walking through the snow

________________________________________________________________________
________________________________________________________________________

A snake in the grass

________________________________________________________________________
________________________________________________________________________

A machine mixing cement

________________________________________________________________________
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Water falling over a dam

________________________________________________________________________
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A charging bull

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Children sliding down a hill on a sled

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________________________________________________________________________

A person playing a guitar

________________________________________________________________________
________________________________________________________________________

A dog chasing a squirrel

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________________________________________________________________________
14  Planning (a)

Imagine that you are in charge of setting up a school store where things will be sold to other students in your school. What things would you sell in the store? List the items in the spaces below. Use the back of this page if you need more space.

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What steps would you take in setting up your store? What equipment and workers would you need? How would you advertise, and what would you do to encourage students to shop in your store rather than in a regular store? List your ideas in the space below. Try to be as creative as possible in developing ways to make your store a success. Use the back of this page if you need more space.

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Pretend that you are the campaign manager for one of your classmates who is running for president of the student government. How would you go about organizing and carrying out your candidate’s campaign? What would you do first? What committees would you need, and what responsibilities would you assign to them? Write all the details of your plan in the space below. Try to make your campaign as interesting and creative as possible. Use the back of this page if you need more space.

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15  Hide-a-Word (a)

Sentences can be written in a way that allows writers to hide other words in the sentences. See if you can hide each word listed below in two different sentences. An example is given to help you get started. Use the back of this page if you need more space.

apple
The hunter bragged that he would trap plenty of wild animals.

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person
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drown
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raisin
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15 Hide-a-Word (b)

Sentences can be written in a way that allows writers to hide other words in the sentences. See if you can hide each word listed below in two different sentences. Use the back of this page if you need more space.

born
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________________________________________________________________________
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spine
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hammer
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lower
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**Words with Feeling  (a)**

Good writers try to select words that will help them create the kinds of moods that they want to develop in their stories. You can practice creating moods by thinking of words and phrases that describe each of the situations below. See how many words and phrases you can list that will create each mood. Use the back of this page if you need more space.

- **A waterfall**
- **A railroad train**

- **A busy office**
- **A farm**

- **A sailboat race**
- **A funeral**
16  Words with Feelings  (b)

Good writers try to select words that will help them create the kinds of moods that they want to develop in their stories. You can practice creating moods by thinking of words and phrases that describe each of the situations below. See how many words and phrases you can list that will create each mood. Use the back of this page if you need more space.

<table>
<thead>
<tr>
<th>A thunderstorm</th>
<th>A rock concert</th>
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<table>
<thead>
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<th>Thanksgiving dinner</th>
<th>A rocket launching</th>
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<td>______________________</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Kittens playing</th>
<th>A cattle stampede</th>
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<tbody>
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17 Haiku (a)

Haiku is an ancient Japanese form of poetry. The entire poem consists of only seventeen syllables written in three lines. The first and third lines must contain five syllables, and the second line must contain seven syllables. The lines do not have to rhyme. Study the following poems and then see if you can write your own haiku. Give each of your poems a title.

You! Bold Butterfly!
Dare you flutter so calmly
As my net descends?

Feeling lonely now
I turn from the cold light to
Where my shadow waits.

Quiet, silly bird!
I’ve already heard the news.
Morning comes too soon.

Title

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Writers of haiku have often written about the four seasons of the year. Study the following poems and then see if you can write a haiku about each season.

Cruel Autumn taunts us
With bright and saucy plumage
To mask Winter’s grey.

Oh Glorious Winter!
Deep white paths, cold racing winds,
And me . . . on my sled.
Imagine that you are a cartoonist who is creating a character for a comic strip. Cut out the face parts below and combine them in various ways until you have created an interesting character. After you have decided on the parts of your character, paste them on a separate piece of paper. Then give your character a name and write a brief story about him or her.
Imagine that you are a cartoonist who is creating a character for a comic strip. Cut out the face parts below and combine them in various ways until you have created an interesting character. After you have decided on the parts for your character, paste them on a separate piece of paper. Then give your character a name and write a brief story about him or her.
Most large newspapers have a person on their staff called a “headline cutter.” This person’s main job is to think of headlines that will attract the reader’s attention to the articles that appear in the paper. For each newspaper article below, see if you can think of two short, interesting headlines that will make the reader want to read the article.

BERKELEY, Calif. (UPI)—Agricultural researchers wired a polygraph to some petunias and found the plants responding to emotional situations.

The lie detector showed that the petunias appreciated being watered, worried when a dog approached, “fainted” when violence threatened their growth, and showed sympathy when harm came to nearby foliage.

The California Farm Bureau concluded that gardeners with “green thumbs” probably develop an emotional relationship with their plants.

HOUSTON (AP)—A baby chimpanzee named Bam Bam has been identified as the culprit responsible for an outbreak of hepatitis among employees at the Houston zoo.

There are three confirmed cases and two suspected, with four persons hospitalized. All cases are mild.

Bam Bam shows no sign of the disease, but it is common for primates to carry viruses that infect humans but don’t make the animals noticeably ill.

CAFE KENNEDY (UPI)—Kennedy Space Center has a new pet alligator.

The 4 1/2 footer turned up several weeks ago in a pond in front of the spaceport’s headquarters building. It has been named Kasey after a seven-foot gator that disappeared from the pond several months ago after living there for almost three years.

The original Kasey was a mere three-footer when it discovered the pond. Kasey dined well from food provided by space workers. Some of the gator’s favorites were marshmallows.

The spaceport is a wildlife refuge, and the alligator population is estimated at 2,000.

PROVIDENCE, R.I. (UPI)—Juanita Blair’s faith in human nature has slipped a notch.

A robber who promised he’d return the $50 he stole from Ms. Blair’s Meadowlark Farms store last Friday night did not return.

“I’m disappointed he didn’t come back,” she said.

Asked what she would have done if the man had returned, the store manager said, “I would have said thank you very much for returning the money.”

The robber took $50 from Ms. Blair when he held up the store, saying that’s all he needed and he would return it Monday. She had handed the man $60 that was in the cash register, but the robber returned $10.

Ms. Blair said, “I guess it just goes to show you can’t trust a thief.”
Read the following newspaper articles and see if you can think of two interesting headlines for each article. Each headline should be short and should attract the reader’s attention.

BOZEMAN, Mont. (AP)—A wayward skunk has held up telephone installation work at a $20-million realty corporation south of here.

Telephone contractors at the year-round recreation and resort center have been unable to complete chores since the skunk fell into a construction hole Monday evening. Workers have placed a plank in the hole with hopes of allowing the unwelcome guest to return to a more natural environment.

LODI, Calif. (UPI)—Using cutting torches, highway workers Thursday dismantled the first of 4,000 billboards marked for oblivion in an effort to make California’s highways more beautiful.

“I hope it won’t be recycled into another billboard,” quipped a California resident after the 6-by-24-foot metal sign advertising Harold’s Club of Reno was sent crashing to the ground.

A six-year program by the state will remove all signs not conforming with the federal Highway Beautification Act and the state Outdoor Advertising Act.

MONTPELIER, Vt. (AP)—The Montpelier Area Chamber of Commerce has received a donation to its antishoplifting campaign from an unexpected source.

An anonymous letter arrived from Detroit, Mich., along with a $10 bill and a variety of small items.

“Dear People,” the letter read, “I am sending back some of the things that I stole from the stationers and the grocery store. I am also sending money because you cannot use them again. I apologize for taking them.”

NEWARK, N.J. (AP)—Note for those who think conservationists should go climb a tree: Phillip Littlebud did so Monday and spared a 200-year-old elm from the ax.

The 44-year-old mail carrier perched 30 feet up in the venerable elm and declared he would stay there during his entire month of vacation to keep the Newark council from felling the tree to make room for a soccer field.

The council held a special meeting and decided to put the field elsewhere.
20  Sights, Sounds, and Smells (a)

Imagine that you are walking down a busy street in a large city. All around you are things you can see, hear, and smell. In the spaces below, list the things your senses tell you about the city street. Some examples are given to help you get started. After you have listed the sights, sounds, and smells, write a paragraph describing your walk down the city street. Use the back of this page if you need more space.

Sights

Sounds

tall buildings policeman’s whistle roasted peanuts

Smells

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Imagine that you are walking through a tropical jungle. All around you are things you can see, hear, and smell. In the spaces below, list the things your senses tell you about the jungle. After you have listed the sights, sounds, and smells, write a paragraph describing your walk through the jungle. Use the back of this page if you need more space.
21 Word Families (a)

Study the words below and find as many ways as you can to group them together according to common characteristics. You can use each word as many times as you wish. Some examples of common characteristics are given below.

1. feel  
2. May  
3. cleanliness  
4. goat  
5. strong  
6. sorrow  
7. monumental  
8. representation  
9. Nile  
10. repeatedly
11. bee  
12. California  
13. Mississippi  
14. knife  
15. arrow  
16. moose  
17. big  
18. accept  
19. impress  
20. train
21. borrow  
22. Sally  
23. boat  
24. June  
25. Montana  
26. baboon  
27. reinstate  
28. ball  
29. pistol  
30. small
31. spear  
32. weak  
33. freedom  
34. spider  
35. elephant  
36. Amazon  
37. renominate  
38. justice  
39. inaccurate  
40. impractical

Common characteristics

Words

contain five syllables

opposites

8, 40

17 and 30, 5 and 2
21 Word Families (b)

Study the words below and find as many ways as you can to group them together according to common characteristics. You can use each word as many times as you wish.

| 1. paper | 11. cats | 21. truck | 31. road |
| 2. water | 12. elephant | 22. time | 32. life |
| 3. paints | 13. April | 23. watch | 33. case |
| 4. crayon | 14. daytime | 24. hour | 34. snake |
| 5. boys | 15. eggshell | 25. eyeglass | 35. fever |
| 7. mother | 17. junk | 27. party | 37. bike |
| 8. speed | 18. watermelon | 28. mouse | 38. matches |
| 9. water lily | 19. street | 29. church | 39. phone |
| 10. neighbors | 20. car | 30. hill | 40. number |

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<th>Common characteristics</th>
<th>Words</th>
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</table>
22  Can You Design It? (a)

Did you ever wish that you could change the design of your schoolroom? Imagine that you are an architect and that you have been asked to develop a creative design for a classroom. The room can be any size or shape you want, but it must be able to accommodate about twenty-five students. How would you design your classroom? What furniture, equipment, and other things would you include? Draw your floor plan in the space below.
22 Can You Design It? (b)

Pretend that you have been asked by your city to design a playground or recreation park. The park should have recreation facilities for both children and adults. What types of playing fields and equipment would you have in your park? Draw a ground plan for your recreation park in the space below. Try to include facilities for as many types of activities as possible.
People who work in the field of advertising are always trying to think of clever ways of selling products or getting more people to use their products. For example, they might try to get more people to use their brand of shampoo by saying that well-known athletes use it. Or they might tell how attractive a person will look if she or he uses their products.

Pretend that you are responsible for writing a short television commercial for a company that sells vitamin pills. What would you say to encourage people to buy this brand of vitamins? Write the script for the commercial in the spaces below. Don’t forget to give your vitamins a name.

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23 The Advertising Game (b)

Pretend that you are responsible for writing a short television commercial for a company that makes chewing gum. What would you say to encourage people to buy your brand of chewing gum? Write the script for the commercial in the space below. Don’t forget to give your chewing gum a name.

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Writers of children's stories sometimes make up fanciful or humorous reasons for some of the things that happen in their stories. Imagine that you are a writer of children's stories, and see if you can make up two fanciful or humorous explanations for each question listed below. Don't be afraid to let your mind wander and try to think of some way-out reasons. An example is given to help you get started. Use the back of this page if you need more space.

How did the elephant get his long trunk?
He was always poking it into other animals' business.

How did the football get its shape?

Why do doughnuts have holes in them?
24 The Reason Why (b)

The writers of children’s stories sometimes make up fanciful or humorous reasons for some of the things that happen in their stories. Imagine that you are a writer of children’s stories, and see if you can make up two fanciful or humorous explanations for each question listed below. Don’t be afraid to let your mind wander and try to think of some way-out reasons. Use the back of this page if you need more space.

Why do turtles have shells?
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How did the city of Kalamazoo get its name?
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Why do cats have nine lives?
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<th>CLASS REACTION</th>
<th>FOLLOW-UP ACTIVITIES</th>
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<tr>
<td>1  Thinking about Things</td>
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<td>Thinking about Things</td>
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<td>2  Sames and Opposites</td>
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<td>Sames and Opposites</td>
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<td>3  Way-out Words</td>
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<td>Way-out Words</td>
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<td>4  Changing Things</td>
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<td>Changing Things</td>
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<td>5  Another Point of View</td>
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<td>Another Point of View</td>
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<td>6  Say It with Symbols</td>
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<td>Say It with Symbols</td>
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<td>7  Words with Many Meanings (a)</td>
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<td>7  Words with Many Meanings (b)</td>
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<td>8  Laughing with Limericks (a)</td>
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<td>8  Laughing with Limericks (b)</td>
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<td>9  Building Words (a)</td>
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<td>11 Talk Show (a)</td>
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<td>(a)</td>
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<td>18 Make-a-Character</td>
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<td>(a)</td>
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<tr>
<td>Make-a-Character</td>
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<td></td>
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<tr>
<td>The Headline Cutter (b)</td>
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<tr>
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<td></td>
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<td>Sights, Sounds, and Smells (b)</td>
<td></td>
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<tr>
<td>21 Word Families (a)</td>
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<td>Word Families (b)</td>
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<tr>
<td>22 Can You Design It? (a)</td>
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<tr>
<td>Can You Design It? (b)</td>
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<tr>
<td>23 The Advertising Game (a)</td>
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<td></td>
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<tr>
<td>The Advertising Game (b)</td>
<td></td>
<td></td>
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<tr>
<td>24 The Reason Why (a)</td>
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<tr>
<td>The Reason Why (b)</td>
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<td></td>
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</tbody>
</table>