



**Grade K**  
**Lesson 1-4: Left and Right**

Everything you need to review and teach a Kindergarten lesson. Print Teacher’s Edition pages, Student Edition pages, and ancillaries for Lesson 1-4, Left and Right—all at once!

**Lesson Components:**

- Teacher’s Edition, Chapter 1 Introduction and Lesson 1-4
- “Left” and “Right” Math Vocabulary Kit cards
- Student Edition, pages 9 and 10
- Practice Masters/Workbook, page 9
- Enrichment Masters/Workbook, page 9
- Problem of the Day 1-4
- Teaching Tools 7 and 8
- Every Student Learns, pages 3 and 4
- Home-School Connection, Chapter 1 Family Letters and Study Buddies activity
- Overview of the Math Diagnosis and Intervention System
- Math Diagnosis and Intervention System, “Objects in Space” activity
- Assessment Sourcebook Overview and Chapter 1 Performance Assessment

Name \_\_\_\_\_




## Practice Game

# Spin and Play



## How to Play

1. Take turns spinning the spinner.
2. Find the object. Say its name.  
Tell where it is. ("Messy Monkey's skates are on the bottom shelf.")
3. Place a marker on the object.
4. If you land on Messy Monkey, take an extra turn.
5. Play until both you and your partner find all 5 objects and tell where they are.

### What You Need

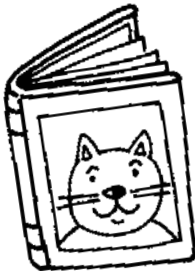
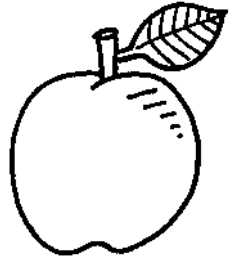
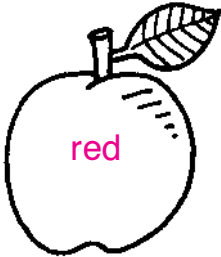
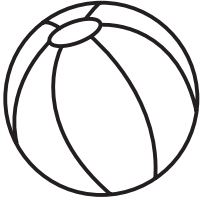
paper clip 

pencil 

5 small game markers  
for each player  



Name \_\_\_\_\_



**Directions** Have children color the ball on the right blue, the apple on the left red, the leaf on the left green, and the book on the right yellow.

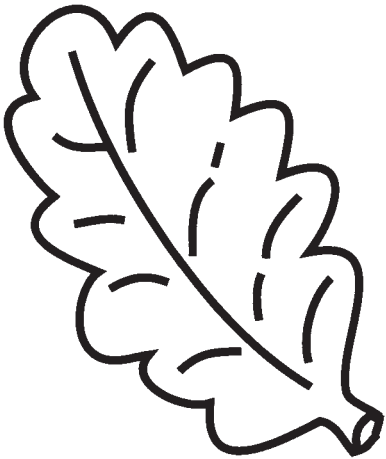
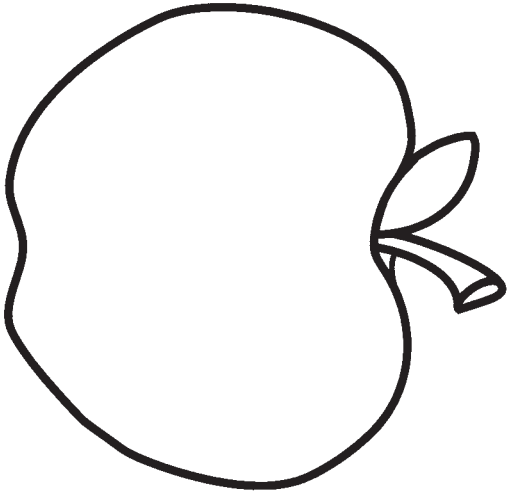


**Directions** Have children color the flower on the left red, the watering can on the right green, the pail on the right yellow, and the flowerpot on the left blue.



**Home Activity** Have your child help you set the table by placing a spoon on the right side of each plate and a fork on the left side. Talk with your child about right and left.

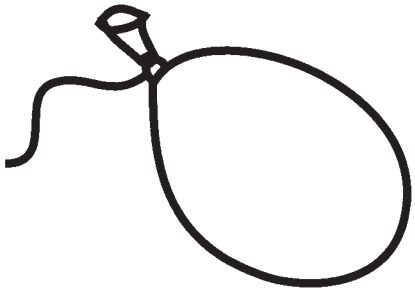
**left**



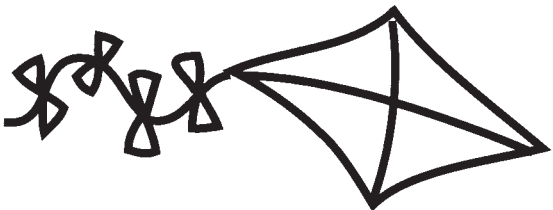
Point to the apple.  
Say: The apple is on the left.

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# right



Point to the kite.  
Say: The kite is on the right.





## Position and Sorting

*Dear Family,*

In this chapter, your child will learn to describe the position of objects using words like *over*, *under*, *on*, *inside*, *outside*, *left*, *right*, *top*, *middle*, and *bottom*. Your child will also learn to sort objects using the words *same* and *different*, and to group objects according to different attributes. He or she will also decide which objects belong to a group based on characteristics such as color, shape, size, and kind.

You can encourage your child to learn these concepts by doing the following activities together.

---

### Matched and Mismatched

**Materials** socks, shoes, hats, other clothing items; two boxes or laundry baskets

**Step 1** Select five or six different articles of clothing and lay them out on a table.

**Step 2** Invite your child to pick out two similar items and explain how they are different and how they are the same. Encourage him or her to talk about the sizes, shapes, and colors of the items. Repeat the activity several times.

**Step 3** Have the child put the items on using various rules for *same* and *different*. For example, you might ask your child to put on two socks of the same color and two shoes of different colors.

### Find the Odd Item

**Materials** a collection of toys or other household objects

While the child is out of the room, place four or five similar objects on the table. Add an object that clearly does not belong. For example, you might add a baseball to a group of toy cars and trucks. Then ask your child to pick out the object that doesn't belong and describe why. Talk with your child about the objects in the group. What makes them the same? What makes the object that doesn't belong different?



## Posición y clasificación

### *Estimada familia:*

En este capítulo, su hijo/a aprenderá a describir la posición de objetos usando palabras y frases como *encima, debajo, sobre, adentro, afuera, a la izquierda, a la derecha, arriba, en el medio y abajo*. Su hijo/a también aprenderá a clasificar objetos usando las palabras *igual/mismo* y *diferente*, y a agrupar objetos de acuerdo con diferentes atributos. También deberá decidir qué objetos pertenecen a un grupo basándose en características como color, forma, tamaño y clase.

Usted puede ayudar a su hijo/a a aprender estos conceptos haciendo juntos las actividades que se describen a continuación.

### **Parejo y desaparejo**

**Materiales** medias, zapatos, sombreros, otras prendas de vestir; dos cajas o canastos para la ropa

**Primer paso** Seleccione cinco o seis prendas de vestir diferentes y colóquelas sobre una mesa.

**Segundo paso** Pídale a su hijo/a que elija dos objetos similares y que explique en qué se diferencian y en qué se parecen. Pídale que hable sobre los tamaños, las formas y los colores de los objetos. Repita la actividad varias veces.

**Tercer paso** Pídale que se ponga las distintas prendas usando distintas reglas de *igual/mismo* y *diferente*. Por ejemplo, le puede pedir que se ponga dos medias del mismo color o dos zapatos de colores diferentes.

### **Busca el objeto que no pertenece al grupo**

**Materiales** un conjunto de juguetes u otros objetos de la casa

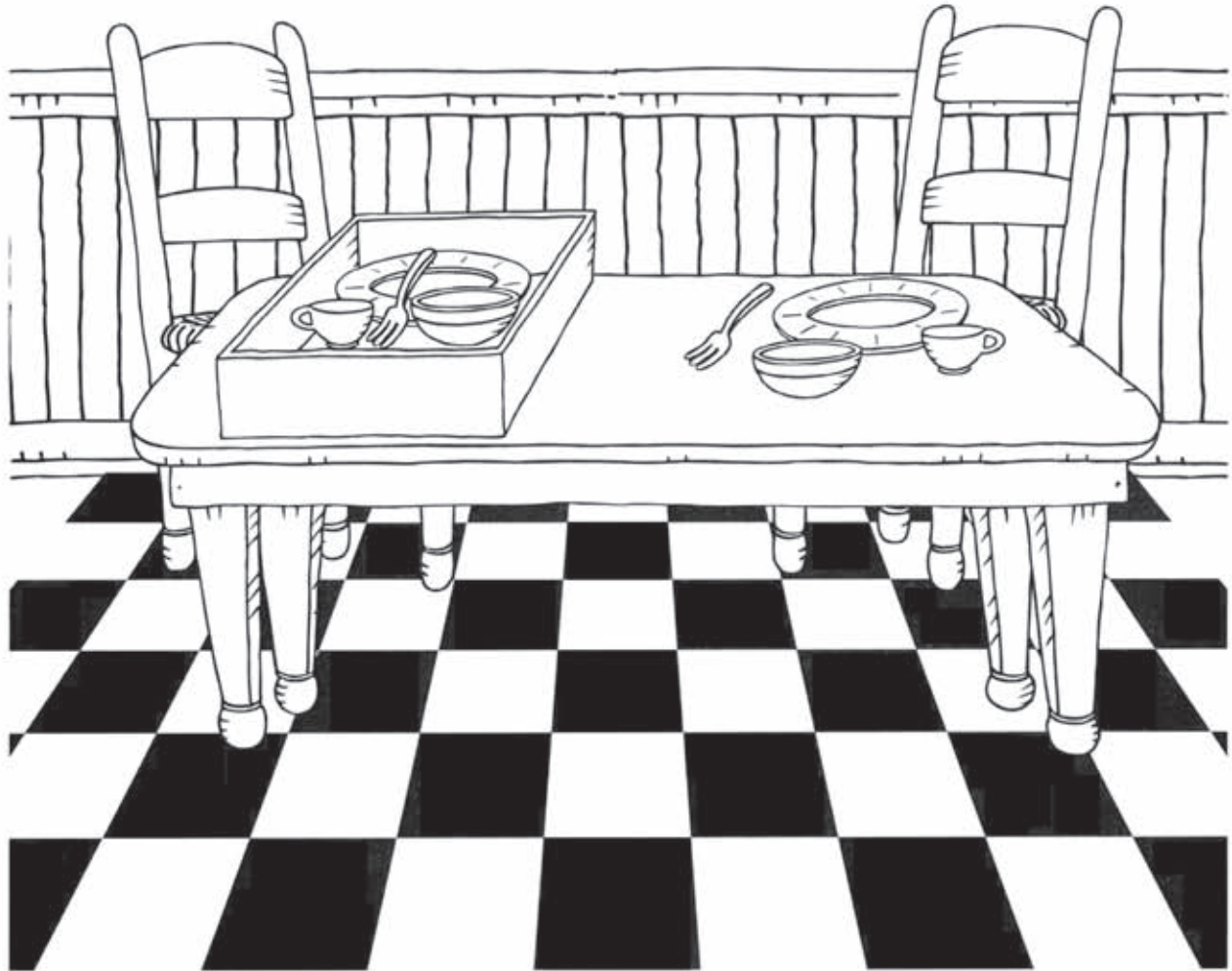
Sin que su hijo/a vea lo que usted está haciendo, coloque cuatro o cinco objetos similares sobre la mesa. Añada un objeto que claramente no pertenezca al grupo. Por ejemplo, puede colocar una pelota de béisbol en un grupo de coches y camiones de juguete. Luego pídale a su hijo/a que seleccione el objeto que no pertenece al grupo y que describa por qué. Hable con su hijo/a acerca de los objetos del grupo. ¿En qué se parecen? ¿Por qué es diferente el objeto que no pertenece al grupo?

Name \_\_\_\_\_



**STUDY BUDDIES 1** STUDENT PAGE

# Inside and Outside



Name \_\_\_\_\_



## STUDY BUDDIES 1 COACH'S NOTES

# Inside and Outside

**Your goal:** To help your buddy understand the positions of objects using the words *inside* and *outside*.

1. Tell your buddy that you are going to practice finding things that are inside and outside the box.
2. Ask your buddy, "What is this?" Point to each of the objects shown outside the box. Make sure your buddy identifies the bowl, plate, cup, and fork.
3. Ask your buddy to circle the cup that is inside the box. Watch to see if your buddy understands the word inside.
4. Ask your buddy to circle the plate that is outside the box. Watch to see if your buddy understands the word outside.
5. Continue asking your buddy to circle different objects either inside or outside the box. You might also point to an object and ask if the object is inside or outside the box.

**Try this:** Throughout your daily activities, reinforce these words and concepts frequently. When you mail something, for example, say, "The letter is outside the mailbox." Then put the letter in the mailbox and say, "Now the letter is inside the mailbox."

allows, choose children to “play teacher”: they choose a classmate and give him or her directions about where to place the counter.

- Use Role Playing** ➤ Bring out the box filled with classroom toys. Place one or two of them randomly on each shelf. Have one volunteer pretend to be a clerk in a toy store. Invite another child to be a customer in the store. Have the customer greet the clerk and ask about the price of a particular toy by identifying its position on a particular shelf: “I’d like to see the red car on the middle shelf. How much does it cost?” Invite the clerk to respond: “Here it is. It costs \$2.00.” Have pairs of children continue the role play and lead the class in comparing and contrasting the words *top*, *middle*, and *bottom* in relation to the locations of given toys.

## Left and Right



**ACTIVATE PRIOR KNOWLEDGE/BUILD BACKGROUND; ACCESS CONTENT**

**Objective** Use the words *left* and *right* to describe position.

**Materials** (*per child*) 1 sheet of construction paper; crayons; construction-paper bracelet (made from one strip with the ends taped together)

**Vocabulary** Left, right

**ESL Strategies**

**Use before** **CHECK** ✓

15–20 MIN

**Connect to  
Prior Knowledge of  
Language** ➤

Give each child a sheet of construction paper. Tell children they will make hand tracings. **First, raise your right hand.** Make sure all children are showing the correct hand. Then have each child place his or her right hand on the construction paper and make a tracing. Then have children repeat the process using their left hands. Continue to reinforce the meanings of *right* and *left* as children work. Encourage them to use the words, too.

**Use Total  
Physical Response** ➤

Have children sit in a circle. Give each of them a construction-paper bracelet. Reinforce the positional meaning of the word *right* as you help children put the bracelets on their right arms. Then lead them in a game of Simon Says. **Simon says put your right hand on your head.**



Help children understand how to perform the command. Explain that in Simon Says, a command that begins with “Simon says ...” must be obeyed. But anyone who performs an action when Simon hasn’t said to do it is “out.”

**Simon says put your right hand on your left foot.** Check to make sure that all children are performing the action correctly. **Now put your left hand on your right foot.** (Pause.) **Uh-oh! Simon didn't say to do that, did he? So if you did it, you have to go back to your chair and sit down.** (Allow time for children who are "out" to return to their seats.) **Simon says put your left hand on your nose.** Continue the game, sometimes saying "Simon says," sometimes not. The winner is the last child left in the circle.

## Same and Different



### ACCESS CONTENT

**Objective** Identify *same* and *different* by the attributes of color, shape, size, and kind.

**Materials** 1 red and 1 green, same-sized construction-paper circles; 2 yellow, different-sized construction-paper triangles; (*per group*) pair of similar items: a magazine and a hardcover book, a pencil and a pen, a penny and a tennis ball, and so on

**Vocabulary** Same (alike), different

### ESL Strategies

**Use before** **LEARN**

10–15 MIN

**Use** >  
**Demonstration**

Hold the same-sized red and green circles up so children can see them. **How are these two shapes the same?** Prompt children to recognize that they are both circles and are the same size. **How are they different?** Prompt children to recognize that they are different in color.

Hold up the different-sized yellow triangles. **How are these two shapes the same?** (*They are both yellow, and they are both triangles.*) **How are they different?** (*They are different sizes. One is bigger and one is smaller.*)

**Use Small-Group** >  
**Interactions**

Divide the class into small groups. Then hand out a pair of similar items, such as a magazine and a book, to each group. Have a volunteer lead each group in asking: "How are these two things the same? How are they different?" Have other children in the group answer the questions. Circulate among the groups and ask clarifying questions as necessary, referring to various attributes the objects may or may not have in common. (*For example, the magazine and the book are both made of paper. But the magazine has a soft cover, and the book has a hard cover.*)

## Sorting by One Attribute



### ACCESS CONTENT

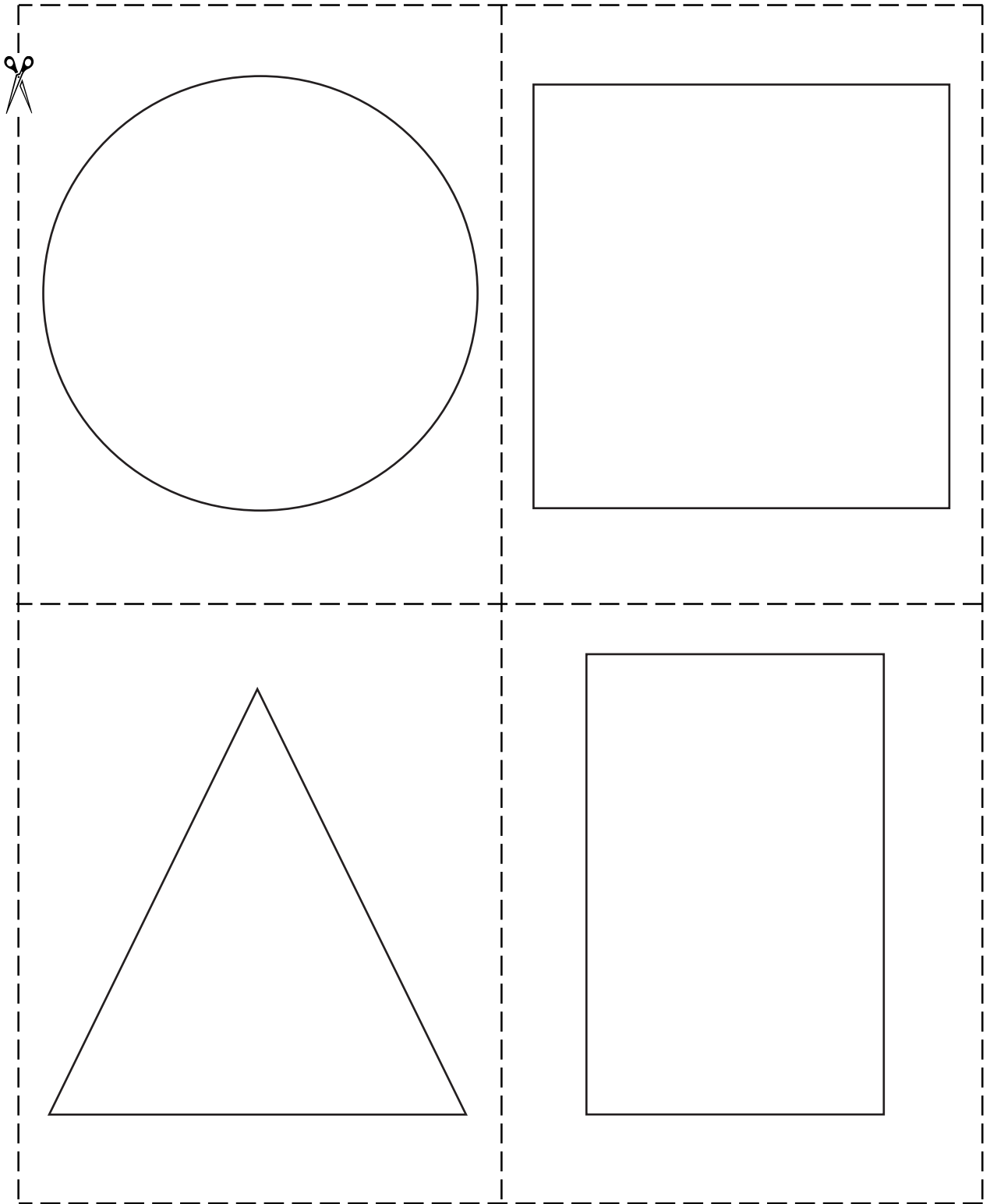
**Objective** Sort objects by one attribute, such as color, shape, size, or kind.

**Materials** Circles, triangles, squares, and rectangles cut out of red, yellow, and blue construction paper

**Vocabulary** Sort

Name \_\_\_\_\_

**TEACHING TOOL**  
**7**

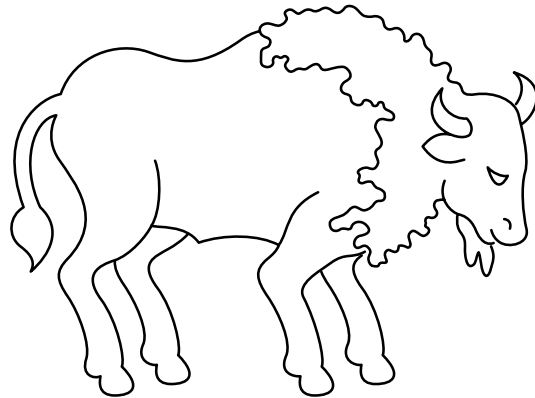
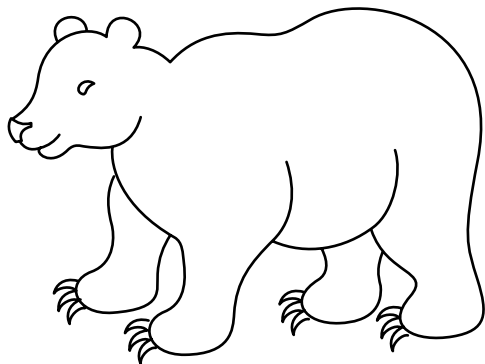
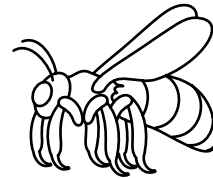
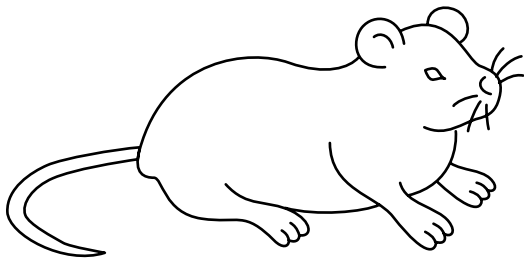
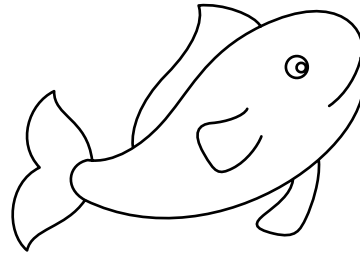
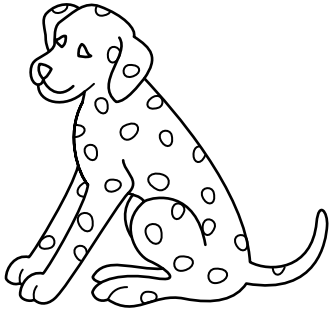


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Name \_\_\_\_\_

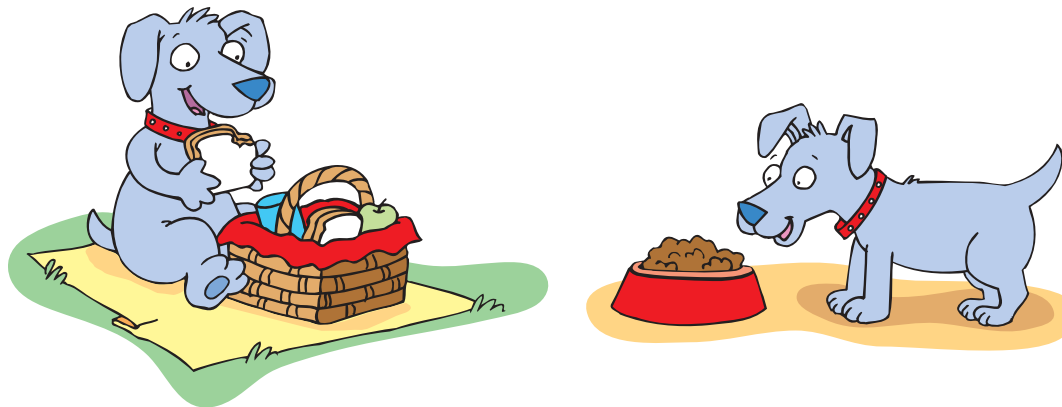
TEACHING TOOL

8



# Problem of the Day

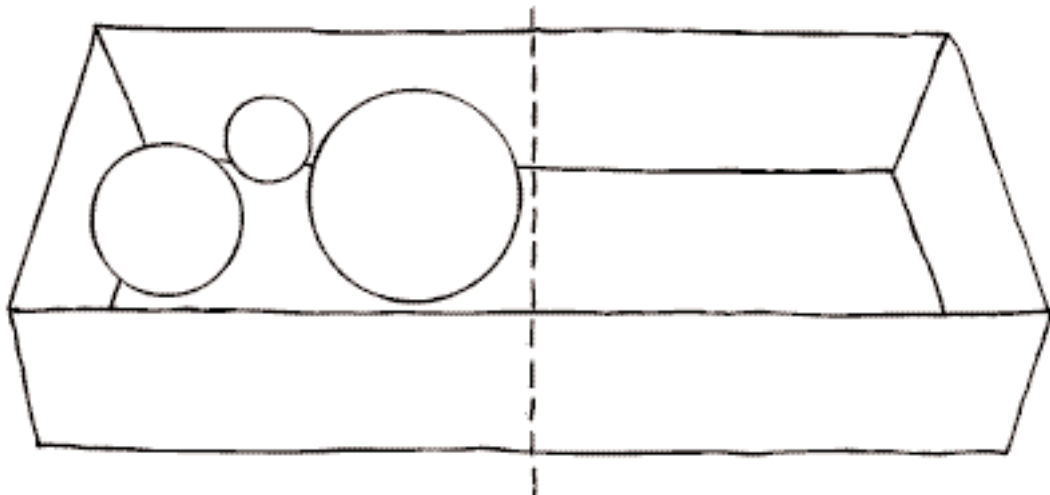
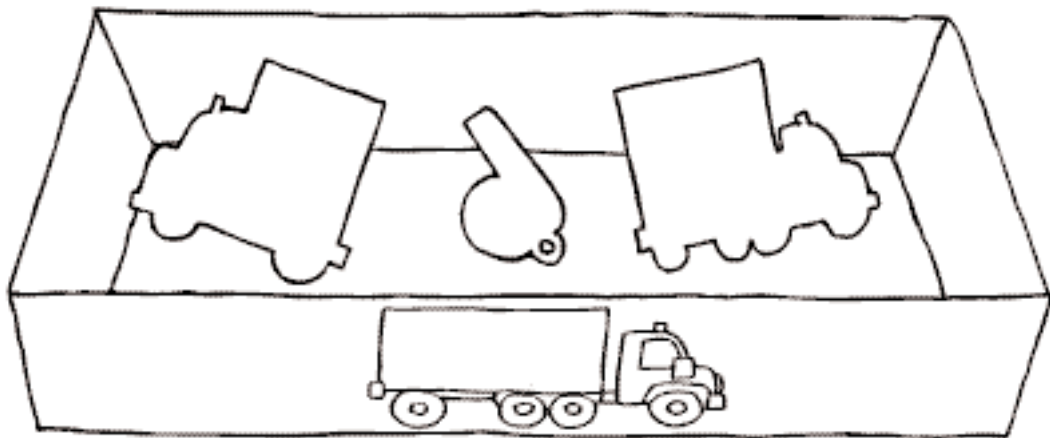
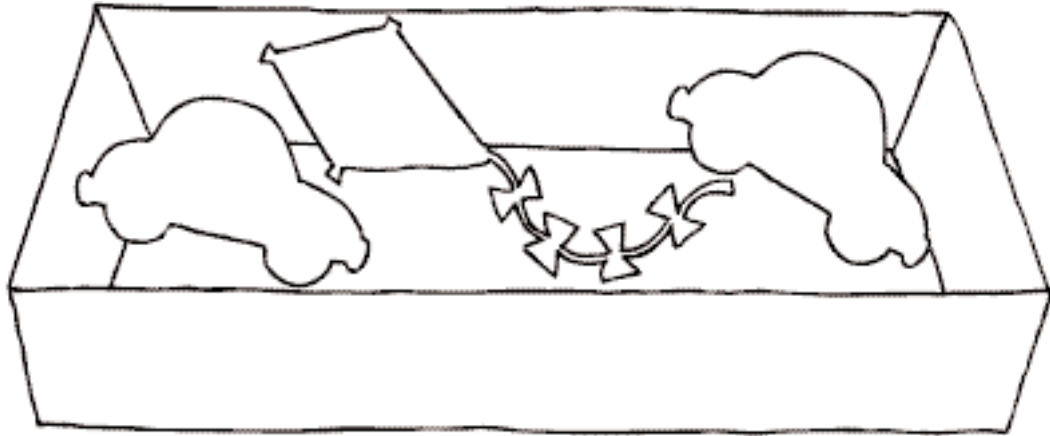
1-4



**Read Aloud** Look at the top two pictures. Which do you think you might really see happen? Why? Look at the bottom pictures. Which of these pictures do you think might really happen? Why?

Name \_\_\_\_\_

## Chapter 1 Performance Assessment



**Directions** See Guiding the Activity in Teacher Notes on page 2 for test directions.

## Chapter 1 Performance Assessment

### Teacher Notes

**Skills and Concepts** This activity requires children to:

- identify top, middle, and bottom.
- identify same and different.
- identify one or more attributes of an object.
- sort objects by using one or more than one attribute.
- identify sorting rules for a group of objects.

#### Materials

- red crayon or marker
- blue crayon or marker
- pencil

#### Guiding the Activity

- Draw a circle around the middle box.
- Draw a red X on the top box.
- Draw a blue X on the bottom box.
- In the top box color the objects that are the same.
- In the middle box color the objects that belong in the box.
- In the bottom box draw an object on the right that belongs with the objects on the left.

#### Answers

The middle box has a circle around it, the top box has a red X on it, and the bottom box has a blue X on it. The 2 cars in the top box are colored, the 2 trucks in the middle box are colored, a circle is drawn on the right in the bottom box.

### Scoring Rubric

<b>4</b>	<b>Full Achievement</b> The child identifies the relation of objects to surrounding objects in different positions and identifies, compares, and sorts objects based on different attributes correctly.
<b>3</b>	<b>Substantial Achievement</b> The child identifies the relation of objects to surrounding objects in different positions and identifies, compares, and sorts objects based on different attributes with minor errors.
<b>2</b>	<b>Partial Achievement</b> The child needs help to correctly identify the relation of objects to surrounding objects in different positions and to identify, compare, and sort objects based on different attributes.
<b>1</b>	<b>Little Achievement</b> The child makes an attempt but needs assistance to complete the steps of the activity.
<b>0</b>	<b>No Achievement</b> The child does not complete any steps of the activity correctly.

# Overview of the Math Diagnosis and Intervention System

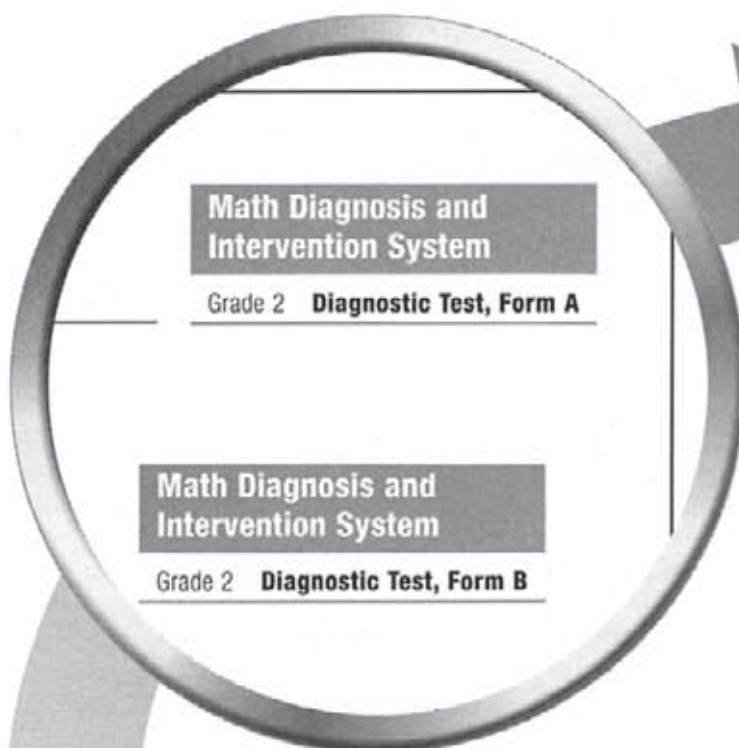
## 1. Assessment

### Entry-level assessment

For a student entering Grade 3, assess prerequisite knowledge of Grade 2 content by using the Grade 2 Diagnostic Test, Form A. Or give the Grade 3 Diagnostic Test, Form A, as a pretest on Grade 3 content.

### Summative evaluation

Use Form B of a Diagnostic Test to check performance after providing instruction or intervention.

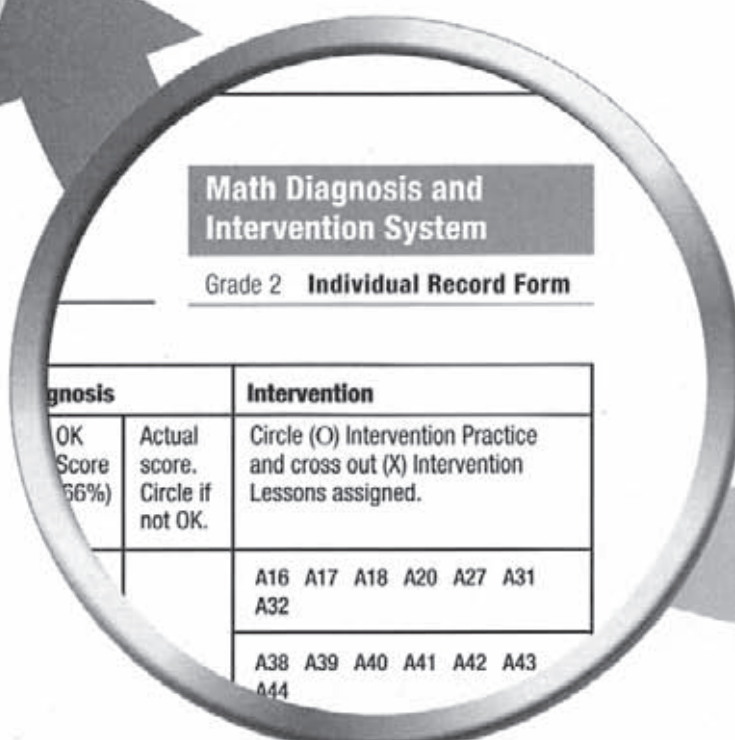


**Diagnostic Tests, Forms A and B**  
Grade-specific, comprehensive

## 4. Monitoring

**Recording progress** On the Individual Record Form, mark test items missed and intervention material assigned.

**Informing parents** Use at parent conferences. Involve parents in monitoring intervention assignments.



**Individual Record Form**  
Item analysis and record of intervention assignments

## 2. Diagnosis

**Analysis of Test Results** On the Class Record Form, mark test items missed and record scores. If performance is unacceptable, give the Diagnostic Test for the previous grade to determine the student's proficiency level.

**Placement** Use test results, along with other performance indicators, to make placement decisions. Should the student use the Grade 3 text, the Grade 2 text, or transitional materials such as those found in the Math Diagnosis and Intervention System?

Numbers, Money, and Place Value								Basic Algebra Concepts					
Numbers to 100		Money		Greater Numbers, Compare & Order		Fractions and Decimals		Number correct for items 1–8. Circle if less than 6.	Addition and Subtraction Basic Facts to 20				
A16 to A32	A33 to A38	A45 to A52	A59 to A62				B30 to B51						
1	2	3	4	5	6	7	8		9	10	11	12	13
x		x						6/8				x	
								_/8					
								_/8					
								_/8					

### Class Record Form

Item analysis, whole class at a glance

### Math Diagnosis and Intervention System

Intervention Practice **A10**

### Math Diagnosis and Intervention System

Intervention Lesson **A10**

### Intervention Practice and Intervention Lessons

Keved to chapters and lessons in the program

## 3. Intervention

**During School** Use grade-specific Intervention Practice and Intervention Lessons for intervention on prerequisite skills at the start of the year, chapter, or lesson. Or use for intervention on content taught during the year.

**In after-school, Saturday-school, or summer-school (intersession) programs** Use as a resource for individualized prescriptions. The booklets are also available as workbooks.

# How to Use the Math Diagnosis and Intervention System

## 1. Assessment

**Using the Diagnostic Tests** For entry-level assessment, choose the appropriate diagnostic test based on whether you want to diagnose readiness by testing content that should have already been learned or you want to give a pretest on content you plan to teach. For summative evaluation, choose the test or part of a test that assesses the content you covered.

**1 Grade specific** Each diagnostic test focuses on grade-specific content. Note that problem solving is integrated throughout each Diagnostic Test.

**2 Organized by booklet topics** Each test is broken into parts. Each part is one or two pages long and covers content in one of Booklets A–E. You can give the entire test or just certain parts.

**3 Parallel forms** Forms A and B are parallel item for item. A “bubble in” Answer Sheet is provided for each Diagnostic Test in Grade 3. At Grades K–2, children record responses right on the page.

The diagram illustrates two parallel diagnostic test forms, Form A and Form B, with callouts 1, 2, and 3 pointing to specific features:

- Callout 1:** Points to the title "Math Diagnosis and Intervention System" on both forms.
- Callout 2:** Points to the "Name" field on both forms.
- Callout 3:** Points to the grade and form identifier "Grade 2 Diagnostic Test, Form A" and "Grade 2 Diagnostic Test, Form B" on both forms.

**Form A:** Math Diagnosis and Intervention System  
Grade 2 Diagnostic Test, Form A

**Form B:** Math Diagnosis and Intervention System  
Grade 2 Diagnostic Test, Form B

**Numbers, Money, and Place Value**

I. Write how much.

6 groups of ten =

6	60	70	80
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 2. Diagnosis

**Using the Class Record Form** The Class Record Form is a good way to get a profile on the performance of individual students as well as groups of students. When the form is completed, you can quickly “see” areas of strength and weakness for an individual (by looking across a row) or for groups of students (by looking down the columns).

- 1 **Use with Form A or Form B** You can use the Class Record Form to record results on Form A or Form B of the Diagnostic Test.
- 2 **Mark items missed** For each student, mark items missed in the appropriate columns.
- 3 **Record scores** Write the total number correct for each part of the test and for the

entire test. Circle scores that fall below the proficiency level of 66%. Use a different proficiency level if you wish.

- 4 **Interpret results** If a student’s score for part or all of the test falls below the proficiency level, give part or all of the diagnostic test for the previous grade. Then use the results to make informed decisions about placement or intervention for that student. Sometimes a group of students or an entire class can benefit from the same intervention. If you’re giving the test as a pretest and a student, group of students, or the whole class does quite well on part of a test, consider skipping that topic for those students or covering it quickly.

**Math Diagnosis and Intervention System**

Date \_\_\_\_\_ Grade 2 Diagnostic Test Form A \_\_\_\_\_ or Form B \_\_\_\_\_ Grade 2 **Class Record Form**

	Numbers, Money, and Place Value								Basic Facts and Algebra Concepts						
	Numbers to 100		Money		Greater Numbers, Compare & Order		Fractions and Decimals		Addition and Subtraction Basic Facts to 20 B30 to B51						
	A16 to A32	A33 to A38	A45 to A52	A59 to A62	1	2	3	4							
Sample	X		X						6				X		
1									___/8						
2									___/8						
3									___/8						
4									___/8						
5									___/8						

1     
 2     
 3

### 3. Intervention

**Using the Intervention Practice and Intervention Lessons** With these resources, you can provide intervention on a few topics or as many topics as needed.

**Intervention during school** Provide intervention after specific lessons or at the end of a chapter.

**Intervention in after-school, Saturday-school, or summer-school (intersession) programs** Use the Intervention Practice and Intervention Lessons that focus on areas of weakness. If there are many areas of weakness, prioritize pages that cover those areas. Or, in

summer school, 1–2 Intervention Lessons can be covered per day. Students can catch up faster if they work on pages independently at home as well as in school.

**1 Intervention Practice and Intervention Lesson on the same content** In Booklets A–E, grade-specific topics are assigned a number, such as A12 or D10. A topic corresponds to the content taught in a lesson of the program at that grade level. For each topic, there is a page of multiple-choice Intervention Practice and a two-page Intervention Lesson with examples.

1

Math Diagnosis and  
Intervention System

Name \_\_\_\_\_

Intervention Lesson **A9**

## Comparing and Ordering Numbers Through 12

Math Diagnosis and  
Intervention System

Name \_\_\_\_\_

Intervention Practice **A9**

## Comparing and Ordering Numbers Through 12

Fill in the  $\bigcirc$  for the correct answer.

Which numbers are in order from least to greatest?

1.

9 2 7

7 9 2

2 7 9

9 7 2

# 4. Monitoring

**Using the Individual Record Form** The Individual Record Form can be used for students who need occasional intervention during the year. It can be used with students who are one to two standard deviations below the mean on standardized tests and need additional work beyond the regular class. The Individual Record Form is particularly helpful when working with students who are at risk of failing and whose progress requires careful documentation and communication.

- 1 **Use with Form A or Form B** You can use the Individual Record Form to record results on Form A or Form B of the Diagnostic Test.
- 2 **Indicate items missed** Circle test items missed.

- 3 **Record scores** Write the total number correct for each part of the test and for the entire test. Circle scores that fall below the proficiency level of 66%. Use a different proficiency level if you wish.
- 4 **Record intervention assignments** Use a circle to mark the Intervention Practice you assign. Cross out to indicate Intervention Lessons you assign.
- 5 **Communicate with parents and helpers** Use the form at parent conferences. You might have students and parents record assignments as they are completed. Pass the form along to tutors or others who are helping the student.

**Math Diagnosis and Intervention System**

Student Name \_\_\_\_\_

Grade 2 **Individual Record Form**

Topic	Grade 2 Content	Assessment and Diagnosis			Intervention
		Circle (O) items missed on Grade 2 Diagnostic Test, Form A ___ or B ___	OK Score (66%)	Actual score. Circle if not OK.	Circle (O) Intervention Practice and cross out (X) Intervention Lessons assigned.
<b>Numbers, Money, and Place Value</b>	Numbers and Place Value to 100	1	6/8	___/8	A16 A17 A18 A20 A27 A31 A32
	Money	2			A38 A39 A40 A41 A42 A43 A44
	Greater Numbers, Comparing, and Ordering	3 4			A45 A46 A47 A48 A49 A50 A51 A52
	Fractions and Decimals	5 6 7 8			A59 A61 A62 A63 A64
<b>Basic Facts and Algebra Concepts</b>	Addition and Subtraction Basic Facts to 20	9 10 11 12 13 14	7/11	___/11	B30 B31 B33 B35 B37 B41 B42 B43 B44 B45 B46 B47 B48 B49 B50 B51
	Multiplication and Division Facts and Properties	15 16 17 18 19			B54 B55 B56 B57 B58 B59 B60 B61

Name \_\_\_\_\_

## Objects in Space

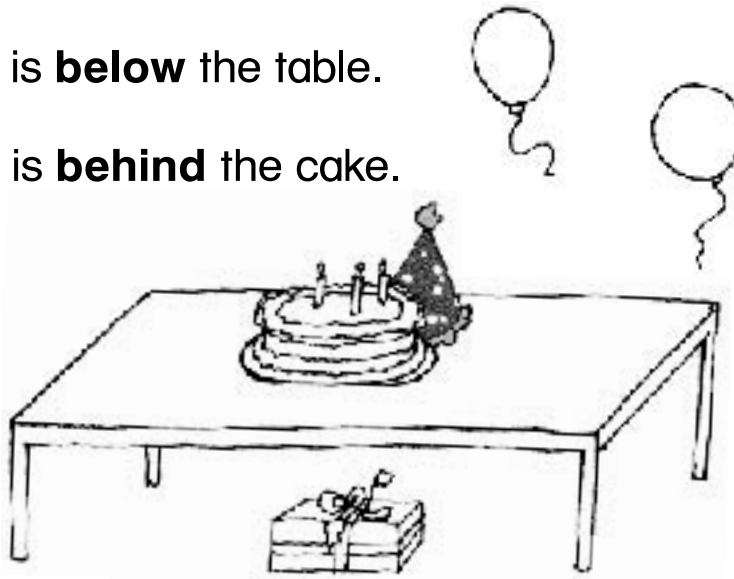
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### Example

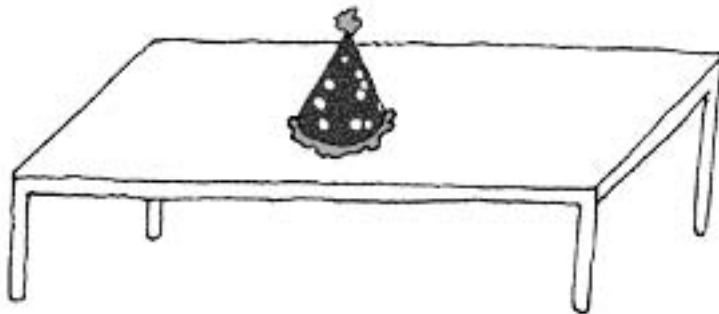
The balloons are **above** the table.

The gift is **below** the table.

The hat is **behind** the cake.

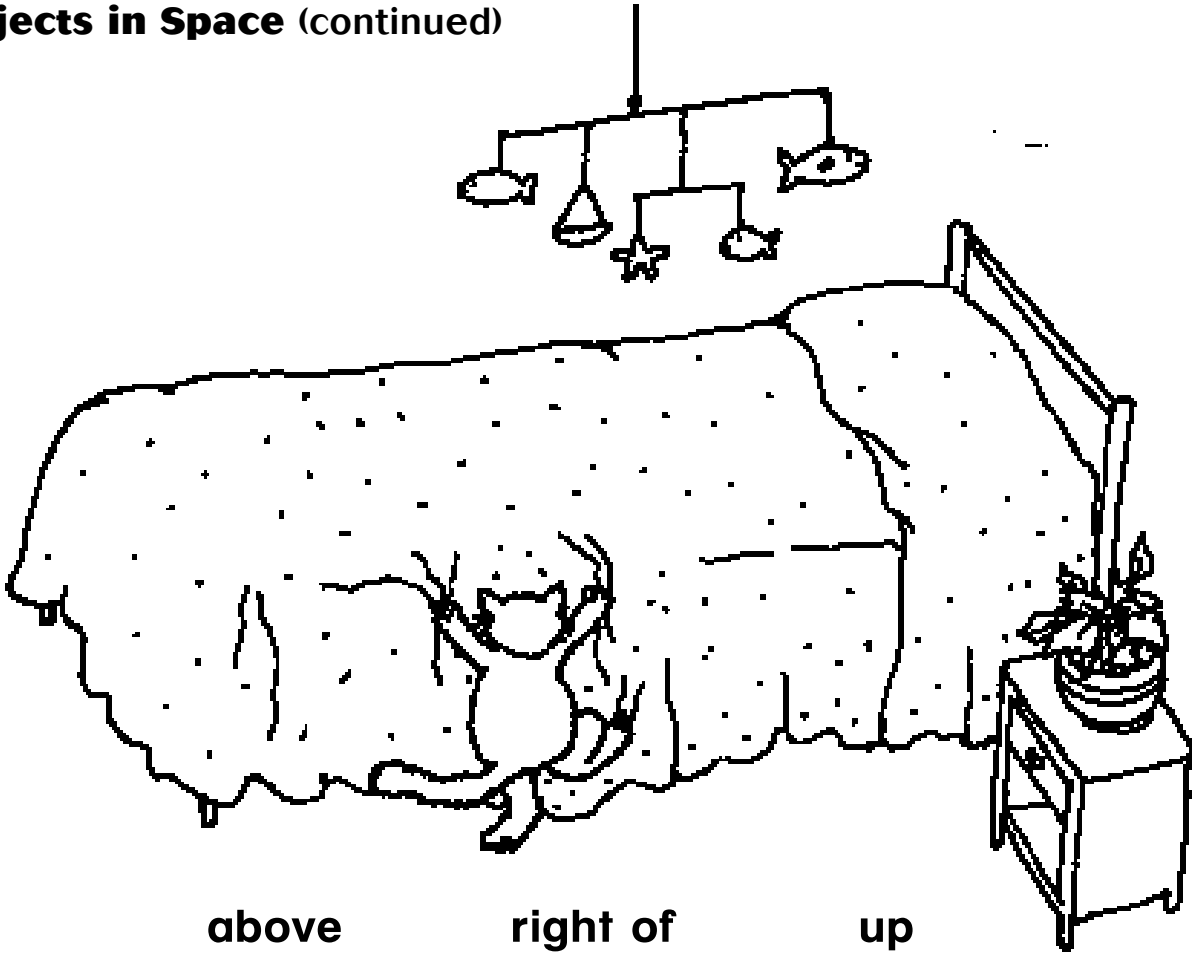


- 
1. Draw a square **above** the table.
  2. Draw a triangle **below** the table.
  3. Draw a cake **behind** the hat.



Name \_\_\_\_\_

**Objects in Space** (continued)



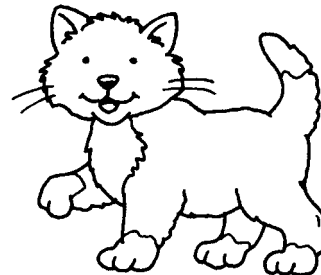
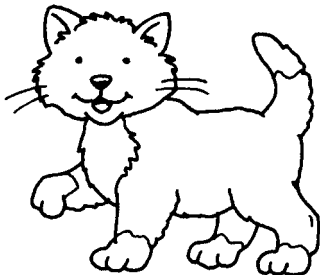
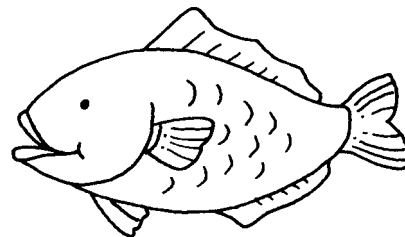
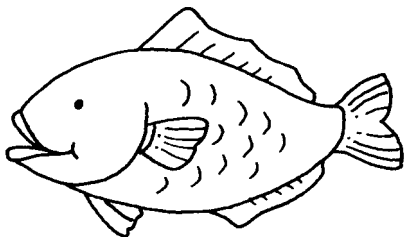
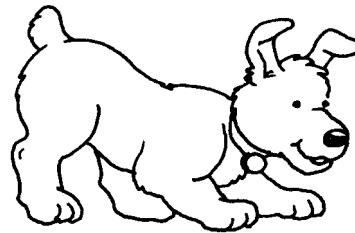
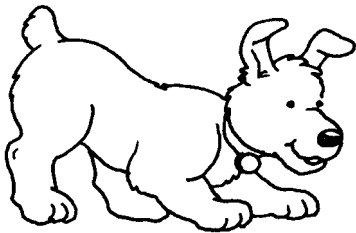
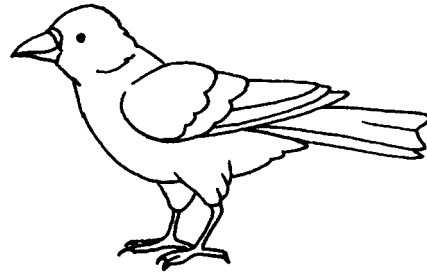
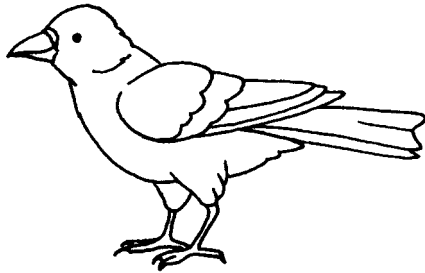
Fill in the blanks with the words above.

4. The plant is to the \_\_\_\_\_ the bed.
5. The cat is climbing \_\_\_\_\_ on to the bed.
6. The mobile is \_\_\_\_\_ the bed.

# Left and Right

Left

Right



**Directions** Have children color the bird on the right blue, the puppy on the left brown, the fish on the right orange, and the kitten on the left yellow.

# Overview of the Assessment Sourcebook

Assessment and instruction are interwoven strands in the fabric of mathematics education. The primary purpose of assessment is to promote learning, so assessment may be referred to as the glue that holds curriculum and instruction together. As a result, the various instructional methods used in Scott Foresman–Addison Wesley Mathematics are supported by different assessment methods. This overview is a brief introduction to the kinds of assessment available in this Assessment Sourcebook, including both formal and informal types of assessment.

## Formal Written Tests

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A variety of formal written tests are provided to assess students' mastery of important mathematics concepts and skills.

### Materials Provided

Blackline masters (starting on page 1)

- **Diagnosing Readiness** in Grades 1–6 to assess students' understanding of mathematical concepts developed in the previous grade level.
- **Chapter Tests** for use with all individual chapters in the student text. In Grades K–2 there are two forms of the Free Response and the Multiple Choice chapter tests. In Grades 3–6, these tests are called Mixed Formats because they contain free-response, multiple-choice, and writing in math questions. There are two forms for each chapter test.
- **Cumulative Tests** provided for use after Chapters 3, 6, 9, and 12.
- **A bubble-form Answer Sheet** to allow students to practice answering test questions on a separate response sheet.

## **Journal Writing**

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Journal Writing encourages students to use mathematical language as they reflect on what they are learning. It also provides an opportunity for you, the teacher, to gain insight as to how students approach problem-solving.

### **Materials Provided**

(starting on page viii)

- Tips for assessing and responding to journal entries
- Ideas for Journal Prompts

## **Portfolio Assessment**

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Portfolio Assessment provides a way of tracking a student's growth and progress over time. A portfolio should include many types of assessment.

### **Materials Provided**

(starting on page xiii)

- Tips and ideas for compiling and managing mathematics portfolios
- Inside My Mathematics Portfolio (blackline master) serves as a table of contents for the portfolios
- A Mathematics Portfolio Assessment Sheet (blackline master) to record how student portfolios track growth in various areas

## **Performance Assessment**

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Performance tests give a way to assess students' qualities of imagination, creativity, and perseverance. By using performance assessment, you can evaluate how students

- reason through problems,
- make and test conjectures,
- use number sense to predict reasonable answers, and
- utilize alternative strategies.

### **Materials Provided**

(starting on page xviii)

- Performance Assessment tasks to be used after each chapter
- Notes that identify the mathematical concepts and skills needed
- A four-point Scoring Rubric

## **Basic-Facts Timed Tests**

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Basic-Facts Timed Tests provide students with the opportunity to review and practice basic facts

### **Materials Provided**

(starting on page 25)

- Tips for administering the tests
- Tips on adjusting time limits
- Additional materials
- Basic-Facts Timed Tests to be used before each chapter

# Journal Writing

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In a mathematics journal, students have the opportunity to explore their thoughts about a particular mathematics topic, to construct and crystallize their understanding of mathematical concepts and procedures, and to explain their ideas about mathematics. As a result, mathematics journals can provide an enormous amount of information about student thinking and are a valuable component of a comprehensive assessment program.

## **The Purpose of Journal Writing**

Journals can be used to reflect, summarize, or generalize about mathematics lessons. They can also be used as a vehicle to apply mathematical concepts or skills. Some other reasons to incorporate journal writing into your mathematics assessment program include

- improving students' skills in communicating their mathematical thinking,
- encouraging application and transfer of previous knowledge to new situations,
- helping students improve creative writing skills,
- helping students explore their thoughts about mathematics,
- providing you with information about students' prior knowledge and what they do or do not understand,
- building and deepening student understanding of mathematical concepts, and
- helping students review and restate just-learned information.

### **Opportunities for Journal Writing**

Journal writing can be incorporated as a natural extension of daily lessons. A few of the opportunities provided throughout the program are listed below.

- Have students respond in their journals to the *Writing in Math* questions presented in most lessons.
- Have students keep a list of new vocabulary that appears in each lesson. Suggest that they include a definition or an example.
- After Problem-Solving lessons, suggest that students write about ways in which the skills and strategies they are learning apply to their everyday lives.

### **Getting Started with Journal Writing**

- Discuss the purpose of each mathematics journal entry and the audience for which it is intended. Students should know before beginning an assignment whether or not their entries will be shared with peers.
- Have students begin each assignment with a 3–5 minute brainstorming session. Then have students free-write about the assignment. During this time, students should jot down ideas, impressions, computations, drawings, or problems they are having with the assignment.
- Allow limited-English-speaking students to first write in the language in which they feel most comfortable. If students are fluent in two languages, encourage them to write in English.
- Include opportunities for students to express their thoughts about assignments in writing.

### **Assessing Journal Writing and Providing Feedback**

When reading student journals, it's important to provide constructive feedback. You may choose to write comments and suggestions right in the journal or on removable note-pad paper. Include questions you have about the entry, and ideas you have about other topics the student might consider. Encourage the student to reply in his or her next entry.

If journal entries are destined for inclusion in the display portfolio, you might wish to have a formal revision stage in the journal writing process in which students revise their entries.

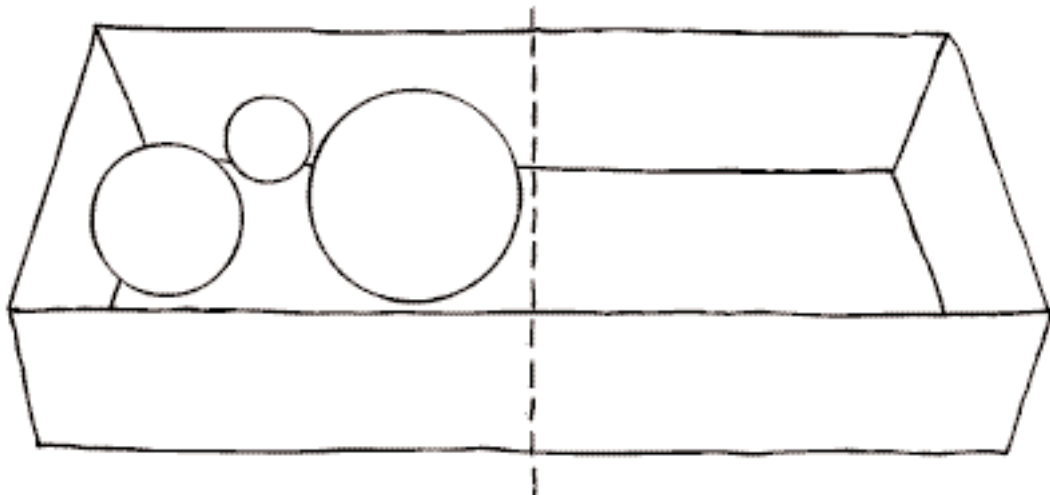
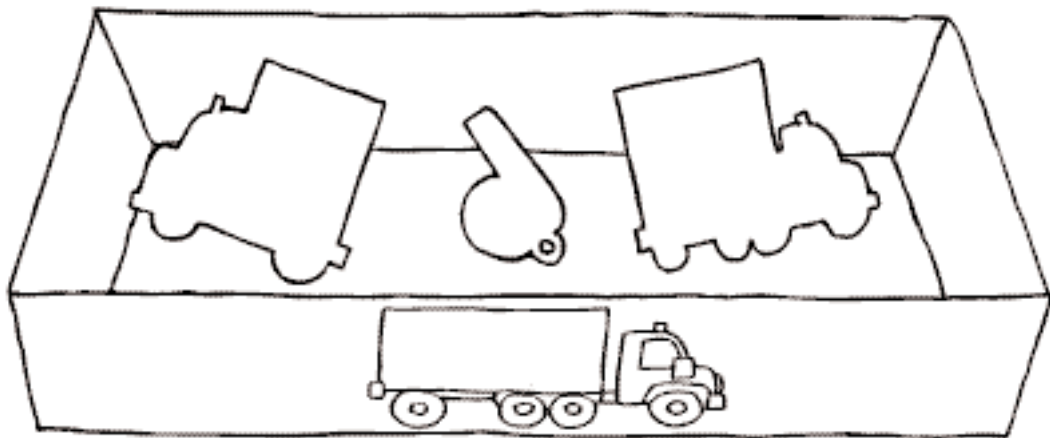
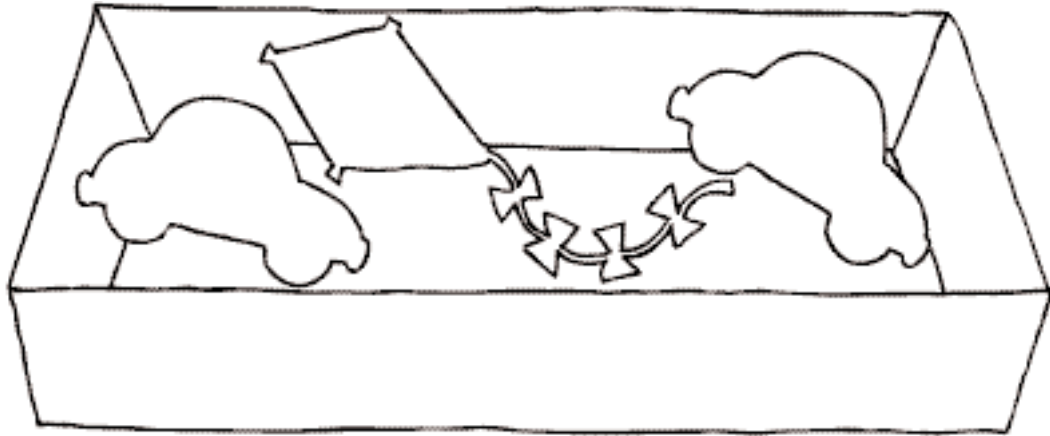
### **Ideas for Journal Prompts**

Periodically during the school year give students a journal prompt and encourage them to write about the subject provided. This activity will provide opportunities for students to communicate their mathematical thinking as well as reinforce their writing skills. Some suggested journal prompts include:

- Today in math I learned...
- My math goals for this year are...
- The math I learned today can be used to...
- You should go back and check your math work because...
- When I need help with my math homework, I...
- My favorite math lesson is...
- I can use a number line to...
- If I had a hundred (thousand, million) dollars, I would...
- All squares are rectangles but not all rectangles are squares because...
- If I were one centimeter tall, I would...
- It is important to read data from a graph because...
- It is important to figure some math problems in your head because...
- Subtraction is the opposite of addition because...
- To find the mean (average) of five numbers, I would...
- It is faster to count to 100 by 10s rather than by 5s because...
- Using coupons at a grocery store can save on the family budget because...
- Since I know that 36 divided by 9 is 4, I can find the quotient of 3,600 divided by 900 by...
- $\frac{1}{2}$  is greater than  $\frac{1}{4}$  because...
- When I think about all the possible numbers between 3 and 4, I know that there are...

Name \_\_\_\_\_

## Chapter 1 Performance Assessment



**Directions** See Guiding the Activity in Teacher Notes on page 2 for test directions.

## Chapter 1 Performance Assessment

### Teacher Notes

**Skills and Concepts** This activity requires children to:

- identify top, middle, and bottom.
- identify same and different.
- identify one or more attributes of an object.
- sort objects by using one or more than one attribute.
- identify sorting rules for a group of objects.

#### Materials

- red crayon or marker
- blue crayon or marker
- pencil

#### Guiding the Activity

- Draw a circle around the middle box.
- Draw a red X on the top box.
- Draw a blue X on the bottom box.
- In the top box color the objects that are the same.
- In the middle box color the objects that belong in the box.
- In the bottom box draw an object on the right that belongs with the objects on the left.

#### Answers

The middle box has a circle around it, the top box has a red X on it, and the bottom box has a blue X on it. The 2 cars in the top box are colored, the 2 trucks in the middle box are colored, a circle is drawn on the right in the bottom box.

### Scoring Rubric

4	<b>Full Achievement</b> The child identifies the relation of objects to surrounding objects in different positions and identifies, compares, and sorts objects based on different attributes correctly.
3	<b>Substantial Achievement</b> The child identifies the relation of objects to surrounding objects in different positions and identifies, compares, and sorts objects based on different attributes with minor errors.
2	<b>Partial Achievement</b> The child needs help to correctly identify the relation of objects to surrounding objects in different positions and to identify, compare, and sort objects based on different attributes.
1	<b>Little Achievement</b> The child makes an attempt but needs assistance to complete the steps of the activity.
0	<b>No Achievement</b> The child does not complete any steps of the activity correctly.

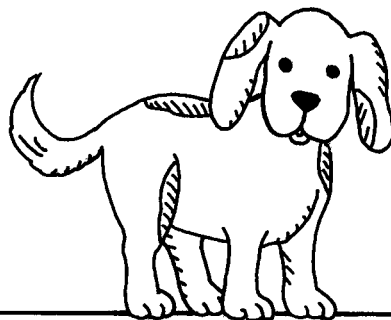
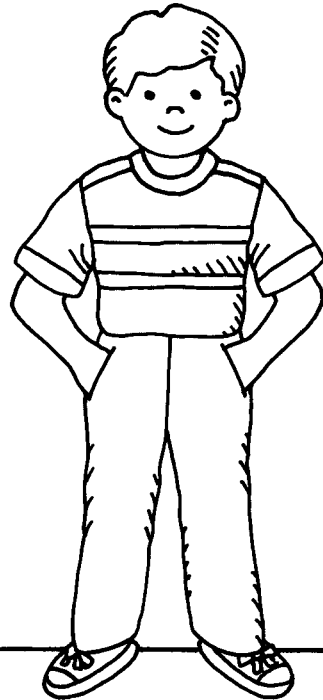
Name \_\_\_\_\_

# Best Friends

**E 1-4**  
**VISUAL THINKING**

Left

Right



**Directions** Have children draw a pet to the right of the child and draw a child to the left of the dog.