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Teacher’s Guide to Using the
Chapter 10 Resource Masters

The Chapter 10 Resource Masters includes the core materials needed for Chapter 10. These materials include worksheets, extensions, and assessment options. The answers for these pages appear at the back of this booklet.

All of the materials found in this booklet are included for viewing and printing on the TeacherWorks Plus™ CD-ROM.

Chapter Resources

Graphic Organizer (page 2) This master is a tool designed to assist students with comprehension of grade-level concepts. You can use this graphic organizer in coordination with the appropriate lesson. While the content and layout of these tools vary, their goal is to assist students by providing a visual representation from which they can learn new concepts.

Student Glossary (page 3) This master is a study tool that presents the key vocabulary terms from the chapter. You may suggest that students highlight or star the terms they do not understand. Give this list to students before beginning Lesson 10-1.

Anticipation Guide (page 4) This is a survey designed for use before beginning the chapter. You can use this survey to highlight what students may or may not know about the concepts in the chapter. If feasible, interview students in small groups, asking them the questions in the guide. There is space for recording how well students answer the questions before they complete the chapter. You may find it helpful to interview students a second time, after completing the chapter, to determine their progress.

Game (page 5) A game is provided to reinforce chapter concepts and may be used at appropriate times throughout the chapter.

Resources for Lessons

Reteach Each lesson has an associated Reteach worksheet. In general, the Reteach worksheet focuses on the same lesson content but uses a different approach, learning style, or modality than that used in the Student Edition.

Skills Practice The Skills Practice worksheet may be helpful in providing additional practice of the skill taught in the lesson. Spaces for students’ answers are provided on the worksheet.

Homework Practice The Homework Practice worksheet provides an opportunity for additional practice. Spaces for students’ answers are provided on the worksheet.

Enrich The Enrich worksheet presents activities that extend the concepts of the lesson or offer a historical or multicultural look at the lesson’s concepts. Some enrichment materials are designed to widen students’ perspectives on the mathematics they are learning. These worksheets are written for use with all levels of students.

Resources for Problem Solving Strategy Lessons In recognition of the importance of problem-solving strategies, worksheets for problem-solving lessons follow a slightly different format. For problem-solving lessons, a two-page Reteach worksheet offers a complete model for choosing a problem-solving strategy. For each Problem Solving Strategy lesson, Reteach and Practice worksheets offer reinforcement of the strategy taught in the Student Edition lesson.
Assessment Options

The assessment masters in the Chapter 10 Resource Masters offer a wide variety of assessment tools for monitoring progress as well as final assessment.

**Individual Progress Checklist** This checklist explains the chapter's goals or objectives. Teachers can record whether a student's mastery of each objective is beginning (B), developing (D), or mastered (M). The checklist includes space to record notes to parents as well as other pertinent observations.

**Chapter Diagnostic Test** This one-page test assesses students' grasp of skills that are needed for success in the chapter.

**Mid-Chapter Test** This one-page chapter test provides an option to assess the first half of the chapter. It includes both multiple-choice and free-response questions.

**Oral Assessment** This two-page test consists of one page for teacher directions and questions and a second page for recording responses. Although this assessment is designed to be used with all students, the interview format focuses on assessing chapter content assimilated by ELL students. The variety of approaches includes solving problems using manipulatives as well as pencil and paper.

**Listening Assessment** This two-page assessment contains one page for teacher directions and one page for responses/recordings. This assessment, too, is suitable for all students but is designed primarily for use with students who may have difficulty reading test materials. The assessment directions progress in difficulty from simple at the beginning of the year to more extensive at the end of the year.

**Leveled Chapter Tests**

- **Form 1** assesses basic chapter concepts through multiple-choice questions and is designed for use with below-level students.
- **Form 2A** is designed for on-level students and is primarily for those who may have missed the Form 1 test. It may be used as a retest for students who received additional instruction following the Form 1 test.
- **Form 2C** is a free-response test designed for on-level students.
- **Form 2D** is written for students with a below-level command of the English language.

**Cumulative Test** This two-page test, aimed at on-level students, reviews content students have had up to this point in the year.

**Answers**

The answers for the Anticipation Guide and Lesson Resources are provided as reduced pages with answers appearing in black. Full size line-up answer keys are provided for the Assessment Masters.
Name

**Graphic Organizer**

*Cause-and-Effect Chart*

A suggestion for how to use this organizer can be found in the answer pages at the back of the book.

<table>
<thead>
<tr>
<th>Cause</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tell a friend what you learned.
<table>
<thead>
<tr>
<th>Vocabulary</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>circle</td>
<td><img src="image" alt="Circle" /></td>
</tr>
<tr>
<td>cone</td>
<td><img src="image" alt="Cone" /></td>
</tr>
<tr>
<td>corner</td>
<td><img src="image" alt="Corner" /></td>
</tr>
<tr>
<td>cube</td>
<td><img src="image" alt="Cube" /></td>
</tr>
<tr>
<td>cylinder</td>
<td><img src="image" alt="Cylinder" /></td>
</tr>
<tr>
<td>plane shapes</td>
<td><img src="image" alt="Plane Shapes" /></td>
</tr>
<tr>
<td>rectangle</td>
<td><img src="image" alt="Rectangle" /></td>
</tr>
<tr>
<td>side</td>
<td><img src="image" alt="Side" /></td>
</tr>
<tr>
<td>solid shapes</td>
<td><img src="image" alt="Solid Shapes" /></td>
</tr>
<tr>
<td>sphere</td>
<td><img src="image" alt="Sphere" /></td>
</tr>
<tr>
<td>square</td>
<td><img src="image" alt="Square" /></td>
</tr>
<tr>
<td>triangle</td>
<td><img src="image" alt="Triangle" /></td>
</tr>
</tbody>
</table>
Before you begin Chapter 10, ask students the following questions. You may want to ask the same questions after students complete the chapter.

Pass out the Anticipation Guide. Have students look at the art as you read the statements aloud. If students agree with the statement, have them color the smiley face. If they disagree, have them color the frown face.

<table>
<thead>
<tr>
<th>Before Chapter</th>
<th>Statement</th>
<th>After Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>This is a triangle.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>This is a cube.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>You can stack this globe.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>This object has a side that looks like a square.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The small square will fit the empty space in the big square.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>A rectangle has three sides.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>A triangle has three corners.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>A square comes next.</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 10 Game Time

What is The Masked Shape?

Ready

You will need:
Small solid objects, such as can, box, ball, party hat, and block
Large paper bag
Paper and crayons

Set

One player selects an object to put into the bag while the other player closes her or his eyes. Hide the other objects.

GO!

1. Reaching into the bag, player 2 uses his or her sense of touch to guess the shape.

2. Player 2 pulls out the object and tells what plane shape she or he sees on the flat part.

3. Switch roles and play again.

4. Continue the game using other objects. Have players trace the flat part of their objects to make a design, and then tell about the shapes.

Extend the Game:

Match each object to the corresponding solid shape.
Name the solid shape. Describe it to a partner. Circle the object that matches.
Skills Practice

Solid Shapes

Preparation: Scissors and glue are needed for this activity.

1. Name the solid shape. Describe it to a partner. Cut and glue the objects that match.

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Circle the object that does not match the solid shape.
Enrich
Write the Shape

1. Look at the solid shapes and their names. Write or draw the solid shape that each object looks like.
Reteach

Compare Solid Shapes

Preparation: Cylinder, cone, cube, and sphere from manipulative kit are needed for this activity.

1. Use a cylinder. Can it roll? Use a cube. Can it roll? Circle the solid shape that can roll. Can other solid shapes roll? Test to see.

2. Use a cone. Can you stack a cube on it? Use a cube. Can you stack a cylinder on it? Circle the solid shape that can have a shape stacked on it. Can other solid shapes stack? Test to see.

1. Color the solid shapes that can have a shape stacked on them.
2. Color the solid shapes that slide.
3. Color the solid shapes that roll.
Draw lines from the objects that can roll, that can have a shape stacked on it, and that can slide to their matching shapes.
Enrich

Matching Game

Draw a line from a shape inside the box to a shape outside the box that matches. Ask a partner to time you. Do it as fast as you can.
**Reteach**

*Plane and Solid Shapes*

**Preparation:** Students will need geometric solid shapes from manipulative kit for this activity.

Find a solid shape and match it to its plane shape. Place the solid shape on the plane shape to check. Color the plane shapes: circles (blue), square (yellow), and rectangle (green).
Skills Practice

Plane and Solid Shapes

1. Trace each plane shape at the top of the page.

2. Circle the plane shape that matches the object.

3. Circle the plane shape that matches the object.

KMG2.0, KMG2.1
Plane and Solid Shapes

Draw a line from the solid shape to the plane shape that matches the shaded side.
## Enrich

### What's Your View?

<table>
<thead>
<tr>
<th>Figure</th>
<th>Top</th>
<th>Front</th>
<th>Side</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Cube" /></td>
<td><img src="image" alt="Top View" /></td>
<td><img src="image" alt="Front View" /></td>
<td><img src="image" alt="Side View" /></td>
</tr>
<tr>
<td><img src="image" alt="Cylinder" /></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Pyramid" /></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 2 3 4 For each shape, draw the sides. The first one is done for you.
Preparation: Scissors and glue are needed for this activity.

Cut out the missing shape. Glue it in the empty space to complete the puzzle.
Circle the shape that is missing.
Skills Practice

Problem-Solving Strategy: Logical Reasoning

Preparation: Scissors and glue are needed for this activity.

1. Circle the shape that is missing from the picture. Students may need to cut out the shapes and glue them in place.

2. [Diagram showing different shapes]
Homework Practice

Problem-Solving Strategy: Logical Reasoning

Preparation: Scissors and glue are needed for this activity.

Complete the puzzle by cutting out each triangle and gluing it in the missing place above.
Finish the square in the middle of the page. Draw a triangle above the square. Draw a tall rectangle to the left of the square. Draw a short rectangle to the right of the square. Draw two circles along the bottom.
Reteach

Squares and Rectangles

1. Say: side, corner, side, corner, side, corner, side, corner as you trace the square. Use a blue crayon and trace each side of the square. Count the sides.

2. Say: side, corner, side, corner, side, corner, side, corner as you trace the rectangle. Use an orange crayon to trace each short side of the rectangle, and use a green crayon to trace each long side. Count the sides.

3. Name each shape. Describe it to a partner using the words corners and sides. Color the squares blue and the rectangles orange.
Skills Practice
Squares and Rectangles

1. Name the shape. Circle the object that matches.

2. Name the shape. Circle the object that does not match.

3. Name the shape. Circle the object that matches.

4. Name the shape. Circle the object that does not match.
Draw two square-shaped and two rectangle-shaped boxes.
**Enrich**

*Square it, Rectangle it!*

**Preparation:** Construction paper, glue, and scissors are needed for this activity.

Use different colors to color each side of the dashed line on the shape. Is a new shape made? What shape is it?

**Extend:** Cut apart and glue new shapes to another paper.
Reteach

Circles and Triangles

Preparation: Large and small attribute triangle and circle buttons are needed for this activity.

1. Trace the large circle. Lay a large attribute triangle button on the circle. What do you see? Do they match? Which has sides? How are they different? Repeat with small circle and small triangle attribute buttons.

2. Trace the large triangle. Lay a large attribute circle button on top of the triangle. What do you see? Do they match? Which has corners? Repeat with the small triangle and the small circle attribute buttons.

3. Color the circles blue and the triangles green.
1. Identify the shape. Circle the objects that are the same shape.

2. Identify the shape. Put an X on the objects that are not the same shape.
Preparation: Scissors and glue are needed for this activity.

Look through magazines, books, or in rooms of your home. Cut and glue or draw magazine pictures, book pictures, or room items of those things shaped like a circle and triangle. Which shape did you find more of?
Draw and name three things that are shaped like a circle in your classroom. Repeat with things shaped like a triangle, a square, and a rectangle.
Preparation: Pattern blocks are needed for this activity.
Draw a line from a group of small shapes to the large shape the group makes.
Preparation: Scissors and glue are needed for this activity.

Color the small shapes. Cut them out. Use only one shape on each part of the clock. Glue them onto the clock. The first triangle has been placed for you.
Homework Practice

Plane Shapes In Position

Preparation: Scissors and glue are needed for this activity.
Color the small shapes. Cut them out. Glue some or all of them to make a larger shape.
**Preparation:** Pattern block hexagon, triangle, trapezoid, and parallelogram are needed for this activity.

1. Use triangles to find out how many triangles it takes to make this shape.
2. Use pattern block trapezoids to find out how many trapezoids it takes to make this shape.
3. Use pattern block hexagons to find out how many hexagons it takes to make this shape.
4. Use any pattern blocks to show how to make this shape.

**Extension:** Trace shapes inside the hexagon or write the number of each shape to make a hexagon.
Reteach
Shapes and Positions with Patterns

Look at the row of shapes. Draw the shape that comes next.

1. Color the triangles blue. Identify the pattern and draw what could come next in the pattern.
2. Color the squares red. Identify the pattern and draw what could come next in the pattern.
3. Color the circles purple. Identify the pattern and draw what could come next in the pattern.
1. Look at the row of shapes. Draw the shape that could come next in the pattern.

2. Use the two shapes to draw your own pattern.
Look at the top row of shapes. Find the pattern. Color the shape that could come next in the pattern.
**Preparation:** Glue is needed for this activity.

Give students a small piece of wallpaper, wrapping paper, or material. Ask them to glue the piece down and to continue the pattern in all directions to fill the page.
# Individual Progress Checklist

<table>
<thead>
<tr>
<th>Mastery Level</th>
<th>Lesson</th>
<th>Learning Goals</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>B D M</td>
<td>10-1</td>
<td>Identify and describe solid shapes, including spheres, cones, cubes, and cylinders.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-2</td>
<td>Sort three-dimensional objects by attributes such as the ability to roll, stack, or slide.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-3</td>
<td>Match the surfaces of three-dimensional shapes to plane shapes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-4</td>
<td>Use logical reasoning to identify solid shapes, including spheres, cones, cubes, and cylinders.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-5</td>
<td>Identify and describe squares and rectangles.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-6</td>
<td>Identify and describe circles and triangles.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-7</td>
<td>Identify triangles and squares when used to form larger shapes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-8</td>
<td>Identify and extend patterns with plane shapes in different orientations.</td>
<td></td>
</tr>
</tbody>
</table>

B = Beginning; D = Developing; M = Mastered

**Note to Parents**

_________________________________________

_________________________________________

_________________________________________

_________________________________________
Diagnostic Test

Are you ready for chapter 10?

1. Circle the two shapes in each row that are the same.

   ![Shapes](image1)
   ![Shapes](image2)

2. Circle the two shapes in each row that are the same.

   ![Shapes](image3)
   ![Shapes](image4)

3. Circle the two shapes in each row that are the same.

   ![Shapes](image5)
   ![Shapes](image6)

4. Circle the two shapes in each row that are the same.

   ![Shapes](image7)
   ![Shapes](image8)
Circle the solid shapes that roll. [Lesson 10.2]
Circle the solid shapes that can have a shape stacked on them. [Lesson 10.2]
Name the solid shape. Circle the plane shape that matches. [Lesson 10.3]
Name the solid shape. Circle the objects that match. [Lesson 10.1]
Directions: This test targets those students who may have developing verbal skills—both oral and written. Ask the questions below and have students record their answers, or record the answers they supply. If students are writing their own answers to yes or no questions, direct them circle a smiley face for “yes” and a frown face for “no.”

Preparation: Board access and pencils are needed for this assessment.

1. Draw a cylinder on the board. Next to the cylinder, draw a can of vegetables. Ask: *Are these the same shape?*
2. Draw a baseball on the board. Next to the baseball, draw a simple cube. Ask: *Are these the same shape?*
3. Show a simple cone. Ask: *Some objects stack. Can a cone have a shape stacked on it?*
4. Draw a rectangular gift box. Ask: *Some objects slide. Do boxes slide?*
5. Draw a simple cube on the board. Next to the cube, draw a square. Ask: *Does the square match a side of the cube?*
6. Draw a large square with a quarter section missing. Next to the square, draw a smaller triangle. Ask: *Is the triangle the missing piece?*
7. Draw a rectangle. Ask: *Does a rectangle have four corners?*
8. Draw a circle. Ask: *Does a circle have three corners?*
9. Show a row of four small squares. Ask: *Can you make a bigger square with these?*
10. Show a row of shapes in this order: square, circle, circle, square, circle, square, circle, square, circle. Below the row, draw another circle. Be sure to leave enough space between the row and the single circle to avoid confusion. Say: *Is this the shape that comes next?*

Notes and comments

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Oral Assessment Response Sheet

1.  
   - Happy
   - Sad

2.  
   - Happy
   - Sad

3.  
   - Happy
   - Sad

4.  
   - Happy
   - Sad

5.  
   - Happy
   - Sad

6.  
   - Happy
   - Sad

7.  
   - Happy
   - Sad

8.  
   - Happy
   - Sad

9.  
   - Happy
   - Sad

10. 
    - Happy
     - Sad
Listening Assessment

**Preparation:** Board access is needed for this assessment.

1. Look at the two shapes. If they are the same shape, draw a smiley face. If they are not the same shape, draw a frown face.
2. Draw an object that can roll.
3. Draw a shape that has three corners.
4. Look at the pattern. Which shape comes next? Draw the shape.
5. Draw the missing shape.
1. How many corners does a triangle have? Circle the number. [Lesson 10.6]
2. Circle the objects that slide. [Lesson 10.2]
3. Which shape could come next in the pattern? Circle your answer. [Lesson 10.8]
4. Circle the shape that is missing. [Lesson 10.4]
Circle the objects that match the shape. [Lesson 10.5]

Circle the object that matches the solid shape. [Lesson 10.1]

If you put the four squares together, what shape could you make? Circle your answer. [Lesson 10.4]

Circle the plane shape that matches one side of the solid shape. [Lesson 10.3]
1. If you put the four squares together, what shape could you make? Circle your answer. [Lesson 10.4]

2. Circle the objects that match the shape. [Lesson 10.6]

3. Circle the objects that roll. [Lesson 10.2]

4. How many sides does a square have? Circle your answer. [Lesson 10.5]

GO on
Circle the plane shape that matches one of the solid shape’s sides. [Lesson 10.3]

Which shape comes next? Circle your answer. [Lesson 10.8]

Circle the object that matches the solid figure. [Lesson 10.1]

Circle the shape that is missing. [Lesson 10.4]
Name

Chapter Test, Form 2C

1. Do lunchboxes stack? Draw a happy face for yes. Draw a frown face for no. [Lesson 10.2]
2. How many corners does a rectangle have? Write your answer. [Lesson 10.5]
3. Draw the plane shape that matches one side of the solid shape. [Lesson 10.3]
4. Draw the shape that could come next in the pattern. [Lesson 10.8]

Preparation: Pattern blocks are needed for this assessment.

GO on
5. Do the object and the solid shape match? Draw a happy face for yes. Draw a frown face for no. [Lesson 10.1]

6. Draw any shape that does not match the missing piece. [Lesson 10.4]

7. Draw a shape you can make with the four triangles. Use pattern blocks to help. [Lesson 10.4]

8. Draw the shape that matches the object. [Lesson 10.6]
Preparation: Pattern blocks are needed for this assessment.

1. Do the shapes match? Draw a happy face for yes. Draw a frown face for no. [Lesson 10.1]
2. Draw the missing piece. [Lesson 10.4]
3. Do boxes slide? Draw a happy face for yes. Draw a frown face for no. [Lesson 10.2]
4. How many sides does a square have? Write your answer. [Lesson 10.5]
5. Draw a shape you can make with four squares. Use pattern blocks to help. [Lesson 10.4]
6. Draw the shape that matches. [Lesson 10.6]
7. Draw the shape that matches one side of the solid figure. [Lesson 10.3]
8. Draw the shape that could come next in the pattern. [Lesson 10.8]
1. Circle the jar that has less. [Lesson 1.7]
2. Circle the object that is shorter. [Lesson 7.3]
3. Count the objects. Circle your answer. [Lesson 8.2]
4. How many corners does a square have? Circle your answer. [Lesson 10.5]
Cumulative Test  (continued)

5 Count the objects. Write the number. [Lesson 6.3]

6 What time is it? Write your answer. [Lesson 9.6]

7 Write the missing number. [Lesson 4.3, Lesson 4.8]

8 Look at the graph. How many baseballs are there? Write your answer. [Lesson 2.2, Lesson 5.4]
Anticipation Guide

Before you begin Chapter 10, ask students the following questions. You may want to ask the same questions before and after the chapter.

Pass out the Anticipation Guide. Have students look at the art as you read the statements aloud. If students agree with the statement, have them color the smiley face. If they disagree, have them color the frown face.

<table>
<thead>
<tr>
<th>Before Chapter Statement</th>
<th>After Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is a triangle.</td>
<td></td>
</tr>
<tr>
<td>This is a cube.</td>
<td></td>
</tr>
<tr>
<td>You can stack this globe.</td>
<td></td>
</tr>
<tr>
<td>An object has a side that looks like a square.</td>
<td>An object has three sides.</td>
</tr>
<tr>
<td>The small square will fit in the empty space in the big square.</td>
<td>A rectangle has three corners.</td>
</tr>
<tr>
<td>A square comes next.</td>
<td>A triangle comes next.</td>
</tr>
</tbody>
</table>

Tell a friend what you learned.

Note to Teacher: This cause-and-effect chart can be used to help students learn to associate plane shapes with solid shapes. Draw solid shapes in the left-hand side of the cause-and-effect chart. Have students draw the corresponding plane shapes.
**Answers (Lesson 10-1)**

**Skills Practice**

Name the solid shape. Describe it to a partner. Circle the object that matches.

- **sphere**
- **cone**
- **cylinder**
- **sphere**

**Reteach**

Name the solid shape. Describe it to a partner. Cut and glue the objects that match.

- **cube**
- **cylinder**
- **cone**
- **sphere**

Preparation: Scissors and glue are needed for this activity.
**Answers (Lesson 10-1)**

**Homework Practice**

**Solid Shapes**

- Name: [Sphere, Cylinder, Cone, Sphere]

**Enrich**

**Write the Shape**

- Cube, Sphere, Cylinder, Cone

**Look at the solid shapes and their names. Write or draw the solid shape that each object looks like.**

- [Circle the object that does not match the solid shape.]

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Answers (Lesson 10–2)

Skills Practice

Compare Solid Shapes

The can and clock are colored.
The can, funnel, and number cube are colored.
The bowling ball and soccer ball are colored.

Names

10-2 Reteach

Compare Solid Shapes

Preparation: Cylinder, cone, cube, and sphere from manipulative kit are needed for this activity.

1. Use a cylinder. Can it roll? Use a cube. Can it roll? Circle the solid shape that can roll.

2. Use a cone. Can you stack a cube on it? Use a cube. Can you stack a cylinder on it? Circle the solid shape that can be stacked.


Colors:
- Roll: Red
- Stack: Blue
- Slide: Green

KMG2.0, KMG2.2

Name

Skills Practice

Compare Solid Shapes

1. Color the solid shapes that can have a shape stacked on them.
2. Color the solid shapes that slide.
3. Color the solid shapes that roll.

Colors:
- Roll: Red
- Stack: Blue
- Slide: Green

KMG2.0, KMG2.2

The can and clock are colored.
The can, funnel, and number cube are colored.
The bowling ball and soccer ball are colored.

Preparation: Cylinder, cone, cube, and sphere from manipulative kit are needed for this activity.

1. Use a cylinder. Can it roll? Use a cube. Can it roll? Circle the solid shape that can roll.

2. Use a cone. Can you stack a cube on it? Use a cube. Can you stack a cylinder on it? Circle the solid shape that can be stacked.


Colors:
- Roll: Red
- Stack: Blue
- Slide: Green

KMG2.0, KMG2.2

Name

Skills Practice

Compare Solid Shapes

1. Color the solid shapes that can have a shape stacked on them.
2. Color the solid shapes that slide.
3. Color the solid shapes that roll.

Colors:
- Roll: Red
- Stack: Blue
- Slide: Green

KMG2.0, KMG2.2

Name

Skills Practice

Compare Solid Shapes

1. Color the solid shapes that can have a shape stacked on them.
2. Color the solid shapes that slide.
3. Color the solid shapes that roll.

Colors:
- Roll: Red
- Stack: Blue
- Slide: Green

KMG2.0, KMG2.2

Name

Skills Practice

Compare Solid Shapes

1. Color the solid shapes that can have a shape stacked on them.
2. Color the solid shapes that slide.
3. Color the solid shapes that roll.

Colors:
- Roll: Red
- Stack: Blue
- Slide: Green

KMG2.0, KMG2.2

Name
**Answers (Lesson 10-2)**

**Homework Practice**

**Compare Solid Shapes**

- **Roll**: Draw lines from the objects that can roll, that can have a shape stacked on it, and that can slide to their matching shapes.

**Enrich**

**Matching Game**

Draw a line from a shape inside the box to a shape outside the box that matches. Ask a partner to time you. Do it as fast as you can.

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**Reteach**

**Plane and Solid Shapes**

**Preparation:** Students will need geometric solid shapes from manipulative kit for this activity.

Find a solid shape and match it to its plane shape. Place this solid shape on the plane shape to check. Color the plane shapes: circles (blue), square (yellow), and rectangle (green).

1. **Circle**
   - Circle
   - Circle

2. **Square**
   - Square
   - Square

3. **Rectangle**
   - Rectangle
   - Rectangle

---

**Skills Practice**

**Plane and Solid Shapes**

Trace each plane shape at the top of the page.

Circle the plane shape that matches the object.

- Square
- Circle
- Triangle
- Circle

**KMG2.0, KMG2.1**
### Answers (Lesson 10-3)

#### Homework Practice

**Plane and Solid Shapes**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Side</th>
<th>Front</th>
<th>Top</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Cube" /></td>
<td><img src="image" alt="Square" /></td>
<td><img src="image" alt="Square" /></td>
<td><img src="image" alt="Square" /></td>
</tr>
<tr>
<td><img src="image" alt="Rectangular Prism" /></td>
<td><img src="image" alt="Rectangle" /></td>
<td><img src="image" alt="Rectangle" /></td>
<td><img src="image" alt="Rectangle" /></td>
</tr>
<tr>
<td><img src="image" alt="Cylinder" /></td>
<td><img src="image" alt="Circle" /></td>
<td><img src="image" alt="Circle" /></td>
<td><img src="image" alt="Circle" /></td>
</tr>
<tr>
<td><img src="image" alt="Cone" /></td>
<td><img src="image" alt="Triangle" /></td>
<td><img src="image" alt="Triangle" /></td>
<td><img src="image" alt="Triangle" /></td>
</tr>
</tbody>
</table>

**Enrich**

What’s Your View?

For each shape, draw the sides. The first one is done for you.

1. For the cube, draw the sides.
2. For the rectangular prism, draw the sides.
3. For the cylinder, draw the sides.
4. For the cone, draw the sides.

#### What’s Your View?

- For the cube, draw the sides.
- For the rectangular prism, draw the sides.
- For the cylinder, draw the sides.
- For the cone, draw the sides.

**Draw a line from the solid shape to the plane shape that matches the shaded side.**

- Cube to Square
- Rectangular Prism to Rectangle
- Cylinder to Circle
- Cone to Triangle

---

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Problem-Solving Strategy: Logical Reasoning

Circle the shape that is missing.

Preparation: Scissors and glue are needed for this activity. Cut out the missing shape. Glue it in the empty space to complete the puzzle.
Skills Practice
Problem-Solving Strategy: Logical Reasoning

Name  

Preparation: Scissors and glue are needed for this activity.

Circle the shape that is missing from the picture. Students may need to cut out the shapes and glue them in place.

KMG2.1

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**Enrich**

Problem-Solving Strategy: Logical Reasoning

Finish the square in the middle of the page. Draw a triangle above the square. Draw a tall rectangle to the left of the square. Draw a short rectangle to the right of the square. Draw two circles along the bottom.

**Reteach**

**Squares and Rectangles**

1. Say: side, corner, side, corner, side, corner, side, corner as you trace the square. Use a blue crayon and trace each side of the square. Count the sides.
2. Say: side, corner, side, corner, side, corner, side, corner as you trace the rectangle. Use an orange crayon to trace each short side of the rectangle, and use a green crayon to trace each long side. Count the sides.
3. Name each shape. Describe it to a partner using the words corners and sides. Color the squares blue and the rectangles orange.
**Answers (Lesson 10-5)**

**Skills Practice**

Name the shape. Circle the object that matches.

Name the shape. Circle the object that does not match.

**Homework Practice**

Squares and Rectangles

Draw two square-shaped and two rectangle-shaped boxes.

Answers will vary.
**Enrich**

### Square it, Rectangle it!

**Preparation:** Construction paper, glue, and scissors are needed for this activity. Use different colors to color each side of the dashed line on the shape. Is a new shape made? What shape is it?

**Extend:** Cut apart and glue new shapes to another paper.

---

**Reteach**

### Circles and Triangles

**Preparation:** Large and small attribute triangle and circle buttons are needed for this activity. Trace the large circle. Lay a large attribute triangle button on the circle. What do you see? Do they match? Which has sides? How are they different? Repeat with small circle and small triangle attribute buttons.

Trace the large triangle. Lay a large attribute circle button on top of the triangle. What do you see? Do they match? Which has corners? Repeat with the small triangle and the small circle attribute buttons.

Color the circles blue and the triangles green.

---

*See students’ work.*
**Skills Practice** (Lesson 10-6)

Circles and Triangles

**Identify the shape. Circle the objects that are the same shape.**

**Identify the shape. Put an X on the objects that are not the same shape.**

**Shape Hunt**

Preparation: Scissors and glue are needed for this activity.

Look through magazines, books, or in rooms of your home. Cut and glue or draw magazine pictures, book pictures, or room items of those things shaped like a circle and triangle. Which shape did you find more of?

KMG2.0, KMG2.1
Answers (Lesson 10-6 and Lesson 10-7)

**Enrich**

**Classroom Shapes**

**Answers will vary.**

Draw and name three things that are shaped like a circle in your classroom. Repeat with things shaped like a triangle, a square, and a rectangle.

**Reteach**

**Plane Shapes In Position**

Preparation: Pattern blocks are needed for this activity.

Draw a line from a group of small shapes to the large shape the group makes.

Grade K

KMG2.0, KMG2.1

Answers will vary.
Skills Practice
Plane Shapes In Position

See students' work.

Possible answer.

Preparation: Scissors and glue are needed for this activity.
Color the small shapes. Cut them out. Glue some or all of them to make a larger shape.

Possible answer.

Preparation: Scissors and glue are needed for this activity.
Color the small shapes. Cut them out. Glue some or all of them to make a larger shape.

KMG2.0, KMG2.2

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**Answers** (Lesson 10-7 and Lesson 10-8)

**Lesson 10-7**

**Preparation:** Pattern block hexagon, triangle, trapezoid, and parallelogram are needed for this activity.

**Use triangles to find out how many triangles it takes to make this shape.**

**Use pattern block trapezoids to find out how many trapezoids it takes to make this shape.**

**Use pattern block hexagons to find out how many hexagons it takes to make this shape.**

**Use any pattern block to show how to make this shape.**

**Extension:** Trace shapes inside the hexagon or write the number of each shape to make a hexagon.

**Enrich**

**Draw the Shape**

- **KMG2.2, KMG2.0**
  - Look at the row of shapes. Draw the shape that comes next.

**Reteach**

**Shapes and Positions with Patterns**

**Lesson 10-8**

**Look at the row of shapes. Draw the shape that comes next.**

**Color the triangles blue. Identify the pattern and draw what could come next in the pattern.**

**Color the squares red. Identify the pattern and draw what could come next in the pattern.**

**Color the circles purple. Identify the pattern and draw what could come next in the pattern.**

**See students’ work**

- **2 trapezoids**
- **6 triangles**
- **1 hexagon**

**Preparation:** Pattern block hexagon, triangle, trapezoid, and parallelogram are needed for this activity.

**Use triangles to find out how many triangles it takes to make this shape.**

**Use pattern block trapezoids to find out how many trapezoids it takes to make this shape.**

**Use any pattern block hexagon to show how to make this shape.**

**Extension:** Trace shapes inside the hexagon or write the number of each shape to make a hexagon.
Shapes and Positions with Patterns

1. Look at the row of shapes. Draw the shape that could come next in the pattern.

2. Use the two shapes to draw your own pattern.

Answers will vary.

KMG2.2, KMG2.0

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Preparation: Glue is needed for this activity. Give students a small piece of wallpaper, wrapping paper, or material. Ask them to glue the piece down and to continue the pattern in all directions to fill the page.

See students’ work.

Glue sample here


## Diagnostic Test

**Are you ready for chapter 10?**

1. [Circle the two shapes in each row that are the same.]

2. [Circle the solid shapes that roll. [Lesson 10.2]]

3. [Circle the solid shapes that can have a shape stacked on them. [Lesson 10.2]]

4. [Name the solid shape. Circle the plane shape that matches. [Lesson 10.3]]

5. [Name the solid shape. Circle the objects that match. [Lesson 10.1]]

## Mid-Chapter Test

**Assessment**

1. [Circle the two shapes in each row that are the same.]

2. [Circle the solid shapes that roll. [Lesson 10.2]]

3. [Circle the solid shapes that can have a shape stacked on them. [Lesson 10.2]]

4. [Name the solid shape. Circle the plane shape that matches. [Lesson 10.3]]

5. [Name the solid shape. Circle the objects that match. [Lesson 10.1]]

---

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Answers (Chapter Test Form 1)

Name

Chapter Test, Form 1 (continued)

1. How many corners does a triangle have? Circle the number. [Lesson 10.6]

2. Circle the objects that slide. [Lesson 10.2]

3. Which shape could come next in the pattern? Circle your answer. [Lesson 10.8]

4. Circle the shape that is missing. [Lesson 10.4]

5. Circle the objects that match the shape. [Lesson 10.5]

6. Circle the object that matches the solid shape. [Lesson 10.1]

7. If you put the four squares together, what shape could you make? Circle your answer. [Lesson 10.4]

8. Circle the plane shape that matches one side of the solid shape. [Lesson 10.3]
1. If you put the four squares together, what shape could you make? Circle your answer. [Lesson 10.4]
2. Circle the objects that match one of the solid shape’s sides. [Lesson 10.6]
3. Which shape comes next? Circle your answer. [Lesson 10.8]
4. Circle the object that matches the solid figure. [Lesson 10.2]
5. Circle the plane shape that matches one of the solid shape’s sides. [Lesson 10.3]
6. Circle the shape that is missing. [Lesson 10.4]
7. How many sides does a square have? Circle your answer. [Lesson 10.5]
8. Circle the objects that roll. [Lesson 10.2]
Answers (Chapter Test Form 2C)

**1.** Do lunchboxes stack? Draw a happy face for yes. Draw a frown face for no. [Lesson 10.2]

**2.** How many corners does a rectangle have? Write your answer. [Lesson 10.5]

**3.** Draw the plane shape that matches one side of the solid shape. [Lesson 10.3]

**4.** Draw the shape that could come next in the pattern. [Lesson 10.8]

**5.** Do the object and the solid shape match? Draw a happy face for yes. Draw a frown face for no. [Lesson 10.1]

**6.** Draw any shape that does not match the missing piece. [Lesson 10.4]

**7.** Draw a shape you can make with the four triangles. Use pattern blocks to help. [Lesson 10.4]

**8.** Draw the shape that matches the object. [Lesson 10.6]
**Answers** (Chapter Test Form 2D)

- **Preparation:** Pattern blocks are needed for this assessment.
- **Do the shapes match?** Draw a happy face for yes. Draw a frown face for no. [Lesson 10.1]
- **Draw the missing piece.** [Lesson 10.4]
- **Do boxes slide?** Draw a happy face for yes. Draw a frown face for no. [Lesson 10.2]
- **How many sides does a square have?** Write your answer. [Lesson 10.5]
- **Draw a shape you can make with four squares.** Use pattern blocks to help. [Lesson 10.4]
- **Draw the shape that matches.** [Lesson 10.6]
- **Draw the shape that matches one side of the solid figure.** [Lesson 10.3]
- **Draw the shape that could come next in the pattern.** [Lesson 10.8]

Answers will vary.
Cumulative Test Chapters 1–10

1. Circle the jar that has less. [Lesson 1.7]
2. Circle the object that is shorter. [Lesson 7.3]
3. Count the objects. Circle your answer. [Lesson 8.2]
4. How many corners does a square have? Circle your answer. [Lesson 10.5]

5. Count the objects. Write the number. [Lesson 6.3]
6. What time is it? Write your answer. [Lesson 9.6]
7. Write the missing number. [Lesson 4.3, Lesson 4.8]
8. Look at the graph. How many baseballs are there? Write your answer. [Lesson 2.2, Lesson 5.4]

My Favorite Things

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat</td>
<td>Bird</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Grade K 54 Chapter 10

Answers (Cumulative Test)