Chapter 1

Lesson 2

Examining Two-Dimensional Figures

NCTM Standards 3, 6, 7, 8, 9, 10
Common Core State Standards 1.G 1

Lesson Planner

STUDENT OBJECTIVE
- **To identify, draw, and describe two-dimensional figures**

2 Teach and Practice

Extended Activity

- (A) **Describing Circles, Triangles, and Rectangles** (CCRG p. CC 3)
- (B) **Describing Squares** (TG p. 21)
- (C) **Sorting Figures** Silent Teaching (TG. p. 22)
- (D) **Identifying Figures** (TG p. 23)

MATERIALS

- TR: Activity Master, AM1 or circles, triangles, rectangles, squares of different colors, sizes, and proportions

Lesson Notes

Replace the current Teach and Practice Activity A in **Lesson 1.2** with this extended activity.

About the Activity

Activity A has been extended so that children are asked to distinguish between defining attributes and non-defining attributes of shapes.

2 Teach and Practice

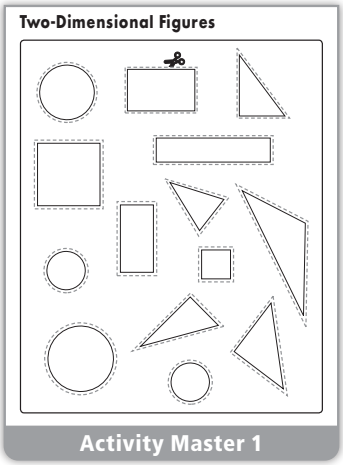
A Describing Circles, Triangles, and Rectangles

small groups 15 MIN

Purpose To identify and describe two-dimensional figures

Introduce Prepare cutouts of circles, triangles, and rectangles (including squares) in different sizes or shapes or reproduce the cutouts from Activity Master 1, on at least two different colors of paper. Provide enough cutouts so that each child will be able to choose one.

Review the names of the figures by holding one up and asking the class to name it. Display the figures by attaching them to a magnetic board or by attaching them to the chalkboard with reusable tape. Challenge children to find examples of circles, triangles, and rectangles in the classroom.



Activity Master 1

Task **Have small groups decide how to describe a particular figure.** Organize children into three groups. Assign a name (circle, triangle, and rectangle—squares will be discussed in the next activity) to each group. Have each child choose an example of that figure from your collection. Give them a minute or two together to discuss how their figures are the same.

Talk Math Let each group describe its figure to the class. Record their descriptions on the board. If necessary, ask prompting questions like the following:

- Do all the figures have the same color? No.
- Do all the figures have the same size? No.
- Do your figures have curves? The circles have curves; the others do not have curves. (For the circle's description, write, "curved.")
- Do your figures have straight sides? How many? Triangles have three straight sides; rectangles have four straight sides.

Circles	round curved big and small red or yellow
Triangles	straight sides 3 sides 3 corners big and small red or yellow
Rectangles	straight sides 4 sides 4 corners skinny or fat big and small red or yellow

Finally, discuss how the shape of each figure is *different* from the others. For example, a circle has curves and the other shapes do not. Ask children how they can tell if a shape is a triangle, a rectangle, or a circle. If necessary, add to the recorded descriptions to make these differences clear.

Practice On the board, add another column to the descriptions of the shapes. Have volunteers draw 2 examples for each shape.

Save the cutouts and descriptions for Activities B and C.

Materials

- For the teacher: circles, triangles, and rectangles (including squares) in different sizes, proportions, and colors, or two or more sets of colored cutouts from AM1

NCTM Standards 3, 6, 7, 8, 9, 10
CCSS 1.G 1

Differentiated Instruction

Basic Level Some children may benefit from handling larger figures than those on Activity Master 1. You may also wish to limit the number of different colors to two so that children focus more on the shapes than the colors when comparing them.

Ongoing Assessment

How do children describe their figures?

- Do they describe color and size first?
- Do they use terms like sides and corners?
- Do they identify the number of sides and corners?
- Do they realize orientation does not change the shape?