MA.K.GR.1.1

Overarching Standard: MA.K.GR.1
Identify, compare, and compose two- and three-dimensional figures.

Benchmark of Focus

MA.K.GR.1.1: Identify two- and three-dimensional figures regardless of their size or orientation. Figures are limited to circles, triangles, rectangles, squares, spheres, cubes, cones, and cylinders

Benchmark Clarifications

Clarification 1: Instruction includes a wide variety of circles, triangles, rectangles, squares, spheres, cubes, cones, and cylinders.

Clarification 2: Instruction includes a variety of non-examples that lack one or more defining attributes.

Clarification 3: Two-dimensional figures can be either filled, outlined or both.

Related Benchmark/Horizontal Alignment
- MA.K.M.1.1
- MA.K.DP.1.1

Vertical Alignment

Previous Benchmarks	Next Benchmarks
VPK	MA.1.GR.1.1

Terms from the K-12 Glossary
- Circles
- Cones
- Cubes
- Cylinders
- Rectangles
- Spheres
- Squares
- Triangles

Purpose and Instructional Strategies

The purpose of this benchmark is to help students identify specific two- and three-dimensional figures, and to make connections between the figures. *(MTR.2.1, MTR.5.1)*
- It is not the expectation of this benchmark to make distinctions between two- and three-dimensional figures.

- Instruction focuses on using a variety of figures including different orientations, such as scalene, isosceles, and equilateral triangles, to build the understanding of triangles. (There is no expectation that students learn these terms, but it is important they recognize various types of triangles.) *(MTR.2.1)*
- Instruction for rectangles and squares includes their similarities and differences, and the relationship that all squares are rectangles, but not all rectangles are squares. *(MTR.5.1)*
- Instruction may use manipulatives and other concrete objects to develop student understanding.

Common Misconceptions or Errors
- Students may only recognize figures in a specific orientation or angle distribution (i.e., recognizing isosceles triangles but not scalene).
- Students may not recognize that a square is also a rectangle.
- Students may sort objects by size when asked to sort by shape.
  - For example, students may place large circles with large triangles, or separate large triangles and small triangles.

Strategies to Support Tiered Instruction
- Teacher provides plane figures (circles, squares, triangles, and rectangles), or solid shapes (cones, cylinders, cubes, and spheres) for students to sort.
  - For example, instruction includes having the student sort the shapes by how they are same or by how they are different. The teacher may ask follow up questions such as, "How did you decide to sort the shapes? How many sides does this group have?"

- Teacher provides shapes that are cut out and present to the students in various orientations (i.e., isosceles, scalene, and right triangles): squares, circles, triangles, rectangles. Shapes are scattered in the workspace. Students work to match the squares with the squares, the circles with the circles, etc., until all shapes are grouped. The focus is on students being able to identify shapes when they are oriented differently (i.e., not sitting flat on one side). This task can be replicated for any sets of shapes students are struggling with including solid figures. If needed, reduce the type of shapes being sorted (i.e., instead of sorting 4 types of shapes, only sort 2 types of shapes).

- Teacher provides the following plane figures in multiple sizes: squares, circles, triangles, rectangles. Shapes are scattered in the workspace. Students work to match the squares with the squares, the circles with the circles, etc., until all shapes are grouped. The focus is on students recognizing that shapes of different sizes go in the same group (i.e., all circles large and small should be together). This task can be replicated for any sets of shapes students are struggling with including solid figures.
  - Example:
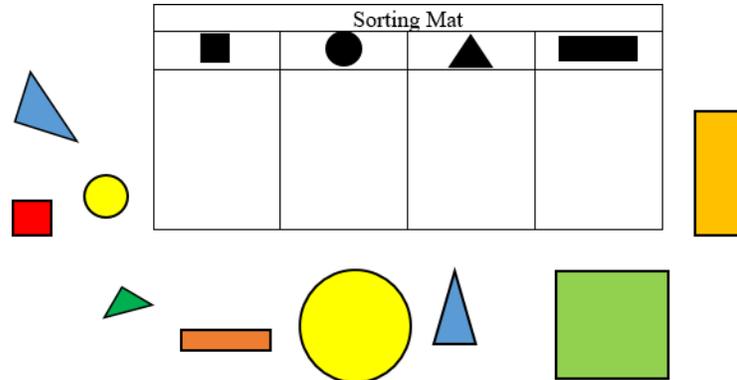
- Teacher provides instruction by doing a "Shape Show". The teacher shows and names a large rectangle. Walk fingers around its perimeter, describing and exaggerating the actions (straight side...turn, straight side...turn, straight side...turn, straight side...stop), while asking students how many sides the rectangle has and count the sides with him or her. Repeat the actions for a large square, drawing connections between the similarities. The teacher explains that squares are a special kind of rectangle.
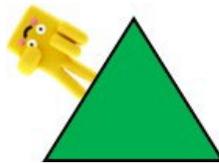
Questions to ask students:

- Which shapes are 2-dimensional? How do you know?
  - Sample answer that indicates understanding: *The shapes I circled are all flat.*
- Which shapes are 3-dimensional? How do you know?
  - Sample answer that indicates understanding: *The shapes I circled are not flat.*

Instructional Tasks

Instructional Task 1: Circle the correct item.
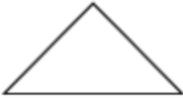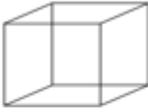
Cone	
Square	
Cylinder	
Triangle	
Cube	
Circle	
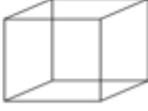
Instructional Items

Instructional Item 1: Using the image below, draw an "x" through all the rectangles.
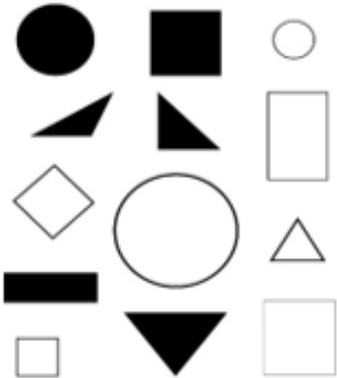
Additional Resources:

CPALMS:

Khan Academy Video: Cousin Fal's Shape Collection

Resources/Tasks to Support Your Child at Home:

Have your child look for the shapes: circles, triangles, rectangles, squares, spheres, cubes, cones, and cylinders. Then have them draw a picture of the different examples of each shape they can find.

SplashLearn Online Game: [Find Shapes All Around Us](#)

Education.com: [2D and 3D Shape Sort Factory](#)

Game: [Monster Mansion Match Shapes](#)