

MA.1.GR.1.4

Overarching Standard: MA.K.GR.1 *Identify and analyze two- and three-dimensional figures based on their defining attributes.*

Benchmark of Focus

MA.1.GR.1.4: Given a real-world object, identify parts that are modeled by two- and three-dimensional figures. Figures are limited to semi-circles, triangles, rectangles, squares and hexagons; spheres, cubes, rectangular prisms, cones and cylinders.

Related Benchmark/Horizontal Alignment

- MA.1.FR.1.1
- MA.1.DP.1.1

Vertical Alignment

Previous Benchmarks	Next Benchmarks
MA.K.GR.1.4	MA.2.GR.1.1 MA.5.GR.1.2

Terms from the K-12 Glossary

- Cone
- Cube
- Cylinder
- Hexagon
- Rectangle
- Rectangular Prism
- Square
- Sphere
- Triangle

Purpose and Instructional Strategies

The purpose of this benchmark is for students to recognize that real-world objects can be modeled by two- and three-dimensional figures. In Kindergarten, students looked for real-world objects that could be modeled by a given two- or three-dimensional figure.

Instructional time for the Kindergarten benchmark was focused on circles, triangles, rectangles, squares, spheres, cubes, cones and cylinders. (*MTR.7.1*)

- Instruction includes guiding students to recognize attributes of three-dimensional figures that are identifiable and found in real-world objects.

- For example, a castle tower shares the attributes of a cone and cylinder.

Common Misconceptions or Errors

- Students may not initially recognize that real-world objects can be composed of multiple figures.

Strategies to Support Tiered Instruction

- Teacher provides geometric solid shapes. Students are asked to find objects around the classroom (or school or playground) that look like any one of their wooden solids.
 - For example, “What things did you find that were shaped like your wooden figures?,” “What things did you find that were made by people?,” or “What things did you find in nature?”



- Teacher provides geometric solid shapes and pattern blocks that reflect skill deficits (i.e., the student has trouble identifying cylinders in real-world context). Teacher instructs students to pick up the solid figure and say the name. Student repeats the name of the figure and identifies something in the room that looks like the solid figure.

Questions to ask students:

- **What shapes can we combine to create this real world object?**
 - Sample answer that indicates understanding: *Students should be able to identify, using defining attributes, the shapes used to create a real-world object and build it. For example, if a student is shown a picture of a hut, the student can combine a cylinder and a cone to recreate the shape and then describe that the curved sides of the two shapes and the vertex of the cone helped them identify the shapes they needed to recreate the shape.*
- **What figures were used to compose this shape?**
 - Sample answer that indicates understanding: *Student should be able to describe, using defining attributes, what two- or three-dimensional shapes were used or they see in a real-world object. For example, if given a picture of a volleyball net, the student can say because of the curved surfaces that have two flat circle face, the poles of the net are cylinders. The student can also point out that the net itself is*

composed of many squares because the shape is a flat shape that has 4 equal sides and 4 angles.

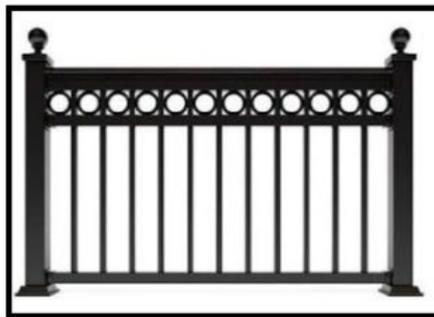
Instructional Tasks

Instructional Task 1

Place the pictures of real-world objects around your classroom. Photos contain real-world objects that model two and three-dimensional figures. (MTR.7.1)

Part A. Look around your classroom for pictures that show real-world objects. In the first column, write a real-world object that is made up of two or more two or three-dimensional figures from the picture. In the second column, identify the figures that compose the real-world object and explain your reasoning.

Real-World Object	Figures that compose the real-world object



Instructional Items

Instructional Item 1

Combine two three-dimensional figures that would model a real-world object.

Instructional Item 2

What figures have been combined to make this tower?



Additional Resources:

[CPALMS](#)

Lessons

[3D Shapes in the Real World](#) (Blog Post)

[Shapes, Shapes, and More Shapes](#) (Blog Post)

Read Aloud

The shape of Things by Dayle Ann Dodds

Shapes All Around by Gare Thompson

Activities and Resources

[Shapes in Real Life](#) (YouTube)

[Shapes-A Trip Around the World](#) (YouTube)

[Shapes of Everyday Objects I](#) (IXL)

[Shapes of Everyday Objects II](#) (IXL)

[2D Shapes in Real Life](#) (Google Slides from Blog Post)

[3D Shapes in Real Life](#) (Google Slides from Blog Post)

[10 Activities to Describe 3D Shapes](#) (Blog Post)

[25 Creative Activities and Ideas For Learning Shapes](#) (Blog Post)

Resources/Tasks to Support Your Child at Home:

[Shape Detective](#) Activity

Shape Flashcards: On flashcards, write or draw a picture of a 2D or 3D shape. Show your child the image of the shape, and then cover it and ask them to describe what they saw. Then have your child find something in the house that matches the shape.

Shapes Memory Game: On some index cards, draw, print out, or cut out images of shapes from a magazine. On the other cards, add the real world items. Have your child find the matching card from the deck.