Chapter 11- Overview & Support
Three-Dimensional Geometry Standards

Standards:

1.G.1 **Reason with shapes and their attributes.**

Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

1.G.2 **Reason with shapes and their attributes.**

Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.

Suggested Routines and Resources:

Open the unit with "shape talks" have students explore 3 dimensional shapes and the properties of the shapes sides and vertices and faces.

Explore objects in the class and label them with object name and 3-D shape name (filing cabinet-rectangular prism, globe: sphere.

Mystery Bag: Create "mystery bags" to allow kids to explore and identify 3-D shapes by feel, not with vision.

Shape Museum: Designate space for 3D shapes that students bring from home (oatmeal canister, tissue box, birthday hat, cracker box, etc.) Allow kids to make sense of collection. Sort by shapes, sizes, attributes, same/different, etc.

Resources to Support Routines:

https://tedd.org/mathematics/

- Quick Images
- Counting Collections
- Choral Countings
- Number Strings

Number Talks by Sherry Parrish (several books available at site

SVMI from the EGUSD Math Gen Blog:
http://blogs.egusd.net/mathgen/grade-level-resources/first-grade/

Three Act Tasks https://gfletchy.com/3-act-lessons/

Kinder and 1st are appropriate
For end of chapter 11 consider the 3 Act Task: *Sliced Up*

Think Central: For this chapter there is no PMT. The online resource is Mega Math. It is still interactive, just a different resource

Engage NY Resources: Identifying, Composing, and Partitioning Shapes
https://www.engageny.org/resource/grade-1-mathematics-module-5

San Francisco Unified School District - Core Math Curriculum
http://www.sfusdmath.org/accessing-core-curriculum-unit-plans.html

Math Talks: San Francisco Unified School District (page 5)
https://docs.google.com/document/d/1Ki1gn5AOrfB50qlKIgfqcobEU1jMgt1Nzw8YAJi9LvE/edit#

Manipulatives:

3-D shapes, 2-D shapes

Vocabulary:

cone	cube	curved surface	cylinder
flat surface	rectangular prism	sphere	

Strategies for Chapter: Reasoning about attributes of, and composing and decomposing geometric shapes.

Color Coding:

Green (G)- The lesson accurately reflects the Framework standard(s).
Yellow (Y) - This lesson includes notes to refer to while planning the lesson.
Red (R) - This lesson does not accurately reflect the Framework standard(s). Skip the lesson.

Essential Question:

How do you identify and describe three-dimensional shapes?

Lesson-by-Lesson Overview:

Lesson #, Standard	Title	Materials	Vocab	Notes
Show What You Know	Three Dimensional Geometry	two colored counters, 3 section spinner (eTResources TR65)	cone, cube, cylinder, sphere,	

		blue, green and orange crayons		
11.1 G 1.G.1	Three-Dimensional Shapes	Models of 3-D shapes, 3-D shapes	cone, cube, curved surface, cylinder, flat surface, rectangular prism, sphere	
11.2 G 1.G.2	Combine Three-Dimensional	models of 3-D shapes		
11.3 G 1.G.2	Make New Three Dimensional Shapes	Models of 3-D shapes, 3-D shapes		Allow students time to create shapes using the 3-D foam shapes for additional practice
Mid Ch. Checkpoint				Test has more than one possible answer
11.4 G 1.G.2	Take Apart Three Dimensional Shapes	models of 3-D shapes		
11.5 G 1.G.1	Two-Dimensional Shapes on Three Dimensional Shapes	models of 3-D shapes		Suggested option: allow students to stamp faces of 3-D objects to identify the flat surface of the shape (o.j. can to create a circle)
Ch. 11 Test				Question 1,2,4,10 have multiple answers
Reteach Options	More practice using 3-D shapes			