7
GRADE

Mathematics Curriculum

π

Topic E:

Problems Involving Volume

7.G.B.6

Focus Standard:	7.G.B.6	Solve real-world and mathematical problems involving area, volume, and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.
Instructional Days:	3	
Lesson 25:	Volume of Right Prisms (P)[1]	
Lesson 26:	Volume of Composite Three-Dimensional Objects (P)	
Lesson 27:	Real-World Volume Problems (P)	

Until Grade 6, students have studied volume using right rectangular prisms. In Grade 7, Module 3, students began to explore how to find the volumes of prisms with bases other than rectangles or triangles. In Lesson 25, students complete several context-rich problems involving volume. Some problems require students to use what they know about the additive property of volume (**5.MD.C.5c**) and to use displacement to make indirect measurements (e.g., a typical context might include a stone placed in a container of water). In Lesson 26, students calculate the volume of composite three-dimensional figures, some of which have missing sections (prism-shaped sections). In Lesson 27, students use a rate of flowing liquid to solve modeling problems such as how long it takes to fill a pool or how much water is used to take a shower.

---

[1] Lesson Structure Key: **P**-Problem Set Lesson, **M**-Modeling Cycle Lesson, **E**-Exploration Lesson, **S**-Socratic Lesson