Topic C:

Slicing Solids

7.G.A.3

Focus Standard:	7.G.A.3	Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.
Instructional Days:	4	
Lessons 16:	Slicing a Right Rectangular Prism with a Plane (E)[1]	
Lesson 17:	Slicing a Right Rectangular Pyramid with a Plane (E)	
Lesson 18:	Slicing on an Angle (E)	
Lesson 19:	Understanding Three-Dimensional Figures (P)	

In Topic C, students begin exploring cross sections, or slices, of three-dimensional shapes and examining the two-dimensional results of different kinds of slices. In Lesson 16, students learn what it means to slice a three-dimensional figure with a plane and examine slices made parallel to the base of right rectangular prisms and pyramids. In Lesson 17, students slice the prisms and pyramids with vertical slices so that the plane meets the base in a line segment and contrast these cross sections to ones from the previous lessons. In Lesson 18, students experiment with skewed slices and try to predict how to slice figures to yield particular shapes, like how to slice a cube in order to get a cross section shaped like a triangle or a pentagon. Finally, in Lesson 19, students study three-dimensional figures created from unit cubes but from the perspective of horizontal, whole-unit slices. Students learn that the slices can be used to determine the number of cubes in the figure.

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