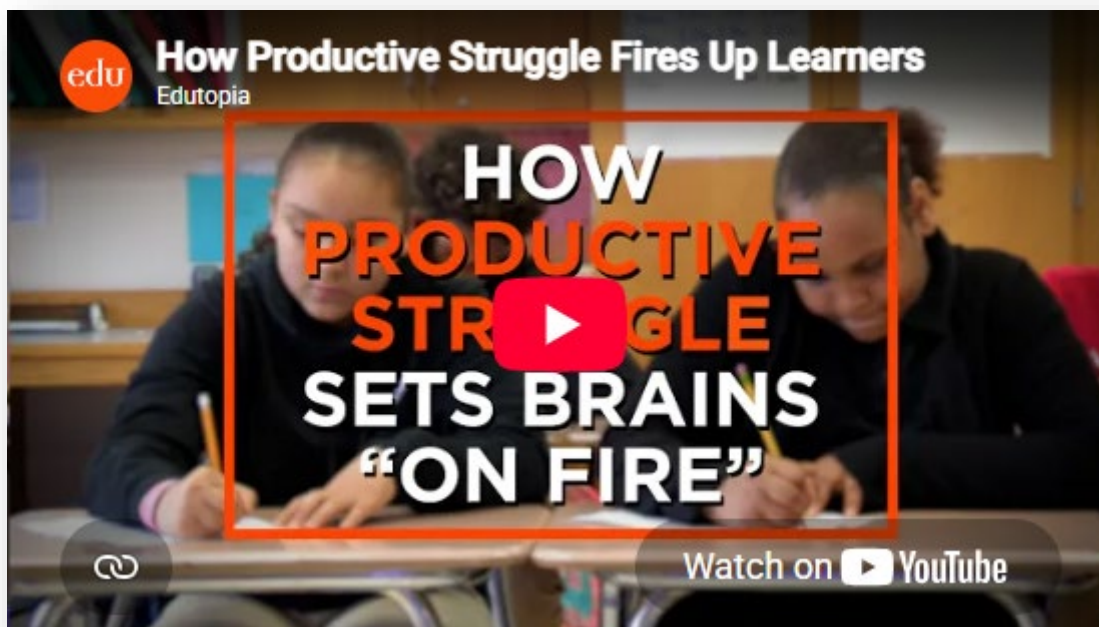


Family Resources for Math 8 Unit 9: Volume

Productive Struggle

Productive struggle is important because it helps students understand math more deeply, build confidence when solving hard problems, and make stronger connections in their brains that support learning. When students work through challenging problems instead of giving up, they build stronger problem-solving skills and gain a better understanding of math concepts. Struggling in a positive way also helps students become more confident and shows them that learning takes time and effort. With support from their teacher, students can learn that mistakes are a normal and valuable part of learning math.



For additional information and resources to support at home, please visit the [Office of Mathematics website](#).

Big Ideas in Unit 9

Within this unit, students will learn these big ideas:

- Cylinders and Cones
- Dimensions and Spheres

For more details about this unit, see [Unit 9 Family Resources](#).

Note: Print and digital resources for Math 8 Unit 9 are from Illustrative Mathematics Grade 8 Unit 5 in alignment with revised Maryland Math standards.

Lesson Specific Resources

Use the links below to learn about the learning from each lesson.

Lesson Link
5.11 Filling Containers
5.12 How Much Will Fit?
5.13 The Volume of a Cylinder
5.14 Finding Cylinder Dimensions
5.15 The Volume of a Cone
5.16 Finding Cone Dimensions
5.17 Scaling One Dimension
5.19 Estimating a Hemisphere
5.20 The Volume of a Sphere
5.21 Cylinders, Cones, and Spheres
5.22 Volume as a Function of..