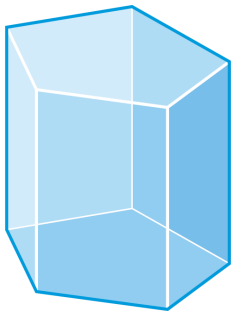
Volume of Prisms and Cylinders



Benchmark

9.3.1.2 Compose and decompose two- and three-dimensional figures; use decomposition to determine the perimeter, area, surface area and volume of various figures.

9.3.1.3 Understand that quantities associated with physical measurements must be assigned units; apply such units correctly in expressions, equations and problem solutions that involve measurements; and convert between measurement systems.

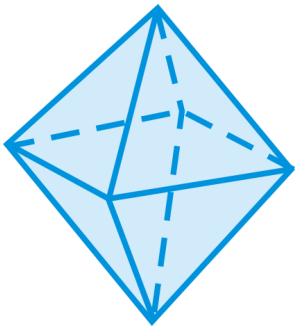
Essential Question: What does volume mean?

Learning Targets:

I can… Find the volume of a prism
I can… Find the volume of a cylinder

Review Questions

1. Define volume in your own words.
2. What is the surface area of a cube with 3 inch sides?
3. What is the surface area of a cube with $4\sqrt{2}$ inch sides?
4. A regular octahedron has 8 congruent equilateral triangles as the faces.



   a. If each edge is 4 cm, what is the surface area of the figure?
   b. If each edge is s, what is the surface area of the figure?