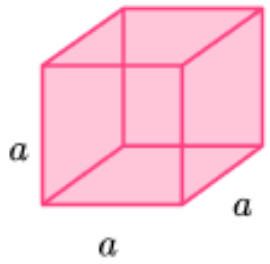
Volume

Facts

Volume is a measure of the amount of 3-D space inside a solid.
The units for area are typically mm^3, cm^3, m^3 or km^3

There are formulas to calculate the volume of some common 3D shapes.

Cube

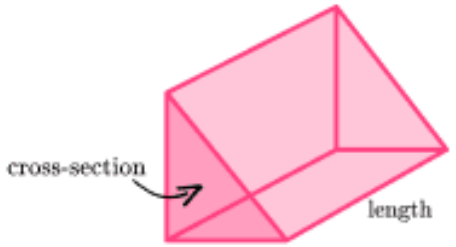


$$\text{Volume} = a^3$$

Cuboid

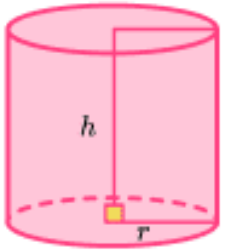
$$\text{Volume} = l \times w \times h$$

Prism



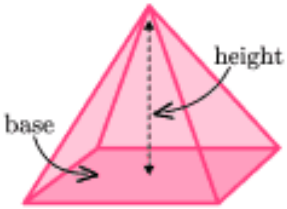
$$\text{Volume} = \text{Area of cross section} \times \text{Length}$$

Cylinder



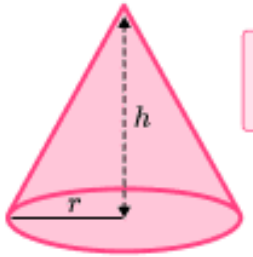
$$\text{Volume} = \pi r^2 h$$

Pyramid



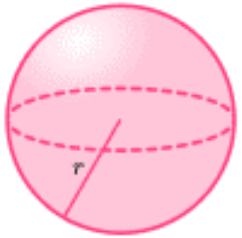
$$\text{Volume} = \frac{1}{3} \times \text{Area of base} \times \text{Height}$$

Cone



$$\text{Volume} = \frac{1}{3}\pi r^2 h$$

Sphere



$$\text{Volume} = \frac{4}{3}\pi r^3$$

THIRD SPACE LEARNING