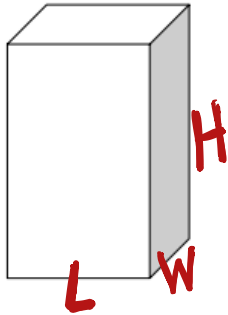


# Geometric Formulas: Rectangular Prisms



Rectangular Prism

Dimensions: Numbers that describe the length, width, and/or height of a shape.

Surface Area: Total area of all of the faces. units: cm<sup>2</sup>, in<sup>2</sup>, ft<sup>2</sup>

$$SA = \underbrace{\text{Area of front} + \text{Area of back}}_{\text{Same}} + \underbrace{\text{Area of side} + \text{Area of side}}_{\text{Same}} + \underbrace{\text{Area of top} + \text{Area of base}}_{\text{Same}}$$

Volume: Number of unit cubes needed to fill a 3D shape. units: cm<sup>3</sup>, in<sup>3</sup>, ft<sup>3</sup>

$$V = BH$$

Area of Base  $\times$  height  
 $(L \times W) \times H$