



FORMULA CHART

Middle School Science

Grade 8



Work = force \times distance

$$W = Fd$$

Speed = $\frac{\text{distance}}{\text{time}}$

$$s = \frac{d}{t}$$

Force = mass \times acceleration

$$F = ma$$

Weight = mass \times acceleration due to gravity

$$\text{Weight} = mg$$

Density = $\frac{\text{mass}}{\text{volume}}$

$$D = \frac{m}{v}$$

Constants/Conversions

$$g = \text{acceleration due to gravity} = 9.8 \frac{\text{m}}{\text{s}^2}$$

$$\text{speed of light} = 3 \times 10^8 \frac{\text{m}}{\text{s}}$$

$$\text{speed of sound} = 343 \frac{\text{m}}{\text{s}} \text{ at sea level and } 20^\circ\text{C}$$

$$1 \text{ cm}^3 = 1 \text{ mL}$$

A tear-out copy of the formula chart and periodic table can be found in the back of this study guide.