

FORMULA CHART
for Middle School—Grade 8 Science Assessment

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	$Weight = mg$
Density = $\frac{\text{mass}}{\text{volume}}$	$D = \frac{m}{v}$

Constants/Conversions
$g = \text{acceleration due to gravity} = 9.8 \frac{\text{m}}{\text{s}^2}$
speed of light = $3 \times 10^8 \frac{\text{m}}{\text{s}}$
speed of sound = $343 \frac{\text{m}}{\text{s}}$ at sea level and 20°C
$1 \text{ cm}^3 = 1 \text{ mL}$

