



Integrated Science Stage 2: Formulae and Data Sheet

stopping distance = reaction distance + braking distance

reaction distance = vt

average velocity $v_{av} = \frac{v + u}{2}$

speed: $v_{av} = \frac{s}{t}$

acceleration: $a = \frac{v - u}{t}$

distance: $s = ut + \frac{1}{2}at^2$

speed of sound: $v = f\lambda$

Prefixes of the metric system

Factor	Prefix	Symbol
10^9	giga	G
10^6	mega	M
10^3	kilo	k
10^{-3}	milli	m
10^{-6}	micro	μ

Specific heat of water: $c_w = 4.180 \times 10^3 \text{ J kg}^{-1} \text{ }^\circ\text{C}^{-1}$

1 tonne = 1000 kg