

# Physical Science Formulas



Don't forget the **UNITS**, numbers need last names!

What are you looking for?	Units	Formula
Density	$\text{g/cm}^3$	$\text{Density} = \frac{\text{Mass (g)}}{\text{Volume (cm}^3\text{)}}$ $D=m/v$
Volume of a Regular Solid	$\text{mm}^3, \text{cm}^3, \text{m}^3$	$\text{Volume} = \text{Height} \times \text{Length} \times \text{Width}$ $V=hlw$
Speed	$\text{m/s}$	$\text{Speed} = \frac{\text{Distance (m)}}{\text{Time (s)}}$ $S=d/t$
Acceleration	$\text{m/s}^2$	$\text{Acceleration} = \frac{\text{Final (m/s)} - \text{Original Velocity(m/s)}}{\text{Time (s)}}$
Momentum	$\text{Kg(m/s)}$	$\text{Momentum} = \text{Mass (kg)} \times \text{Velocity(m/s)}$
Force	Newtons	$\text{Force} = \text{Mass(kg)} \times \text{Acceleration(m/s}^2\text{)}$ $F=ma$
Weight	Newtons	$\text{Weight} = \text{Mass(kg)} \times \text{Acceleration due to gravity (9.8 m/s}^2\text{)}$ $W=mg$
Pressure	$\text{N/cm}^2$	$\text{Pressure} = \frac{\text{Force (N)}}{\text{Area(cm}^2\text{)}}$ $P=f/a$
Work	Joule	$\text{Work} = \text{Force(N)} \times \text{Distance(m)}$ $W=fd$

What are you looking for?	Units	Formula
<b>Power</b>	<b>watt</b>	Power = $\frac{\text{Work(J) (or force x distance)}}{\text{Time(s)}}$ $P=w/t$
<b>Ohm's Law</b>	<b>amps</b>	Amperes(current) = $\frac{\text{Volts}}{\text{Ohms(resistance)}}$ $I=V/R$
<b>Electric Power</b>	<b>watts</b>	Electric Power = Voltage x Current $P=VI$ (Watts= Volts x amps)
<b>Electrical Energy</b>	<b>kwh</b>	Electrical Energy = Power(Kw) x Time(h) $E= Pt$
<b>Wave Speed</b>	<b>m/s</b>	$\text{Speed} = \text{Frequency(Hz)} \times \text{Wavelength(m)}$