

Derived quantity and its symbol		Formula	In terms of base quantities	In terms of S.I. base units	S.I. unit (Specific unit) if any
Area	A	$A = l^2$	$l \times l$	m^2	-
Volume	V	$V = l^3$	$l \times l \times l$	m^3	-
Density	ρ	$\rho = \frac{m}{V}$	$\frac{m}{l \times l \times l} = \frac{m}{l^3}$	kgm^{-3}	-
Velocity	v	$v = \frac{l}{t}$	$\frac{l}{t}$	$m s^{-1}$	-
Acceleration	a	$a = \frac{v}{t}$	$\frac{l}{t \times t} = \frac{l}{t^2}$	ms^{-2}	-
Force	F	$F = m \times a$	$m \times \frac{l}{t^2} = \frac{ml}{t^2}$	$kg m s^{-2}$	newton (N)
Momentum	p	$p = m \times v$	$m \times \frac{l}{t} = \frac{ml}{t}$	$kg ms^{-1}$	-
Pressure	P	$P = \frac{F}{A}$	$\frac{l}{t^2} \times \frac{1}{l \times l} = \frac{ml}{lt^2}$	$kg m^{-1} s^{-2}$	pascal (Pa)
Energy or Work	W	$W = F \times l$	$\frac{ml}{t^2} \times l = \frac{ml^2}{t^2}$	$kg m^2 s^{-2}$	joule (J)
Charge	Q	$Q = I \times t$	$I \times t$	As	coulomb (C)