

5. Classify each of the terms in the left-hand column by placing a tick in the relevant box. Write in the dimensions (in terms of SI base units) for each in the last box.

	Base unit	Derived unit	Base quantity	Derived quantity	Dimensions
Length			x		m
Kilogram	X				(kg)
Current			x		A
Power				x	$\text{Js}^{-1}$
Weight				x	$\text{kgms}^{-2}$
Force				x	$\text{kgms}^{-2}$
Coulomb		x			A·s
Meter	X				(m)
Time			x		s
Newton		x			$\text{kg}\cdot\text{ms}^{-2}$
Acceleration				x	$\text{ms}^{-2}$
Pascal		x			$\text{kgm}^{-1}\text{s}^{-2}$
Temp. interval				x	K
Charge				x	A·s
Energy				x	$\text{kg}\cdot\text{m}^2\text{s}^{-2}$
Voltage				x	$\text{kgm}^2\text{A}^{-1}\text{s}^{-3}$
Density				x	$\text{kgm}^{-3}$
Momentum				x	$\text{kgms}^{-1}$
Mass			x		kg
Ampere	X				(A)
Seconds	X				(s)
Velocity				x	$\text{ms}^{-1}$
Resistance				x	$\text{kgm}^2\text{s}^{-3}$
Tension				x	$\text{kgms}^{-2}$
Joule		x			$\text{kgm}^2\text{s}^{-2}$