Topic	Equations and units	**Level**	GCSE (or any course for students aged 11-16)
Outcomes	1. To determine the units from an equation 2. To determine the equation from units		
Information for teachers	This exercise helps students to see how equations can be useful in helping to understand where units come from. Make sure students are confident in rearranging simple equations before you do this activity. Avoid triangles but rather teach students how to rearrange equations using inverse (the opposite) operations.		

Equations help us with units and units help us with equations!

Equation	Unit for a	Unit for b	Unit for c
$a = bc$		N	m
	m/s	m	
$a = \frac{b}{c}$	ms^{-1}		
$a = \frac{b}{c}$	mol/dm^3		
$a = \frac{b}{c}$		N	N
$a = \frac{c^2}{b}$		cm^3	cm^3
$a = \frac{b}{c^2}$		cm^3	cm^3

Answers

Equation	Unit for a	Unit for b	Unit for c
$a = bc$	Nm	N	m
$a = \frac{b}{c}$	m/s	m	s
$a = \frac{b}{c}$	ms^{-1}	m	s
$a = \frac{b}{c}$	mol/dm^3	mol	dm^3
$a = \frac{b}{c}$	no units	N	N
$a = \frac{c^2}{b}$	cm^3	cm^3	cm^3
$a = \frac{b}{c^2}$	cm^{-3}	cm^3	cm^3