

Metric

Mega	Kilo	hecto	deca	base unit	deci	centi	milli	micro
10^6	10^3	10^2	10^1	10^0	10^{-1}	10^{-2}	10^{-3}	10^{-6}
				g, m, L	d	c	m	μ
				$(\frac{1}{10^1})$	$(\frac{1}{10^2})$	$(\frac{1}{10^3})$		

$\xrightarrow{\text{move dec to right } (\times 10^n)}$
 $\xleftarrow{\text{move dec to left } (\div 10^n)}$

Basic Skill Sheet

29. $4008 \text{ g} = ? \text{ mg}$

move the decimal: $4008 \text{ g} = 4008000 \text{ mg}$
3 dp

factor labelling: $x \text{ mg} = 4008 \text{ g} \left(\frac{1000 \text{ mg}}{1 \text{ g}} \right)$
conversion factor
 $x \text{ mg} = 4008000 \text{ mg}$

30. $48 \text{ mL} = ? \text{ L}$

① move the decimal: $48 \text{ mL} = 0.048 \text{ L}$
3

② factor labelling: $x \text{ L} = 48 \text{ mL} \left(\frac{1 \text{ L}}{1000 \text{ mL}} \right)$
 $x \text{ L} = 0.048 \text{ L}$

③ use the prefix (convert to the base unit)
 $48 \text{ mL} = 48 \times 10^{-3} \text{ mL}$
 $4.8 \times 10^{-2} \text{ mL}$
 $\times 10^{-3}$

31. $239 \text{ mm} = 23.9 \text{ cm}$

32. $38 \text{ kg} = 38000000 \text{ mg}$