## Metric conversion chart

Most of the world uses the metric decimal system which is based on ten.

| Length |  |
| :---: | :---: |
| mm | millimetres |
| cm | centimetres |
| m | metres |
| km | kilometres |
|  |  |
| $1 \mathrm{~cm}=10 \mathrm{~mm}$ | $1 \mathrm{~m}=100 \mathrm{~cm}$ |
| $1 \mathrm{~km}=1000 \mathrm{~m}$ |  |


| Mass |  |
| :---: | :---: |
| g | grams |
| kg | kilograms |
| $1 \mathrm{~kg}=1000 \mathrm{~g}$ | 1 tonne $=1000 \mathrm{~kg}$ |


| Area |  |
| :---: | :---: |
| $\mathrm{mm}^{2}$ | square millimetres |
| $\mathrm{cm}^{2}$ | square centimetres |
| $\mathrm{m}^{2}$ | square metres |
| $\mathrm{km}^{2}$ | square kilometres |
| ha | hectares |
| $1 \mathrm{ha}=10,000$ square metres |  |
| $100 \mathrm{~mm}^{2}=1 \mathrm{~cm}^{2}$ | 100ha $=1 \mathrm{~km}^{2}$ |

Units smaller than a metre have Latin prefixes:
Deci - means one tenth
(decimetre)
Centi - means one hundredth (centimetre)
Milli - means one thousandth (millimetre)

| Volume and Capacity |  |
| :---: | :---: |
| mL | millilitres |
| L | Litres |
| $\mathrm{cm}^{3}$ | cubic centimetres |
| $\mathrm{m}^{3}$ | cubic metres |
| $1 \mathrm{~mL}=1 \mathrm{~cm}^{3}$ (water) |  |
| 1 cup $=250 \mathrm{~mL}$ (in Australia) |  |
| $1 \mathrm{~L}=1000 \mathrm{~mL}$ |  |
| $1000 \mathrm{~L}=1$ kilolitre or $1 \mathrm{~m}^{3}$ |  |

Units larger than a metre have Greek prefixes:
Kilo - means 1,000; a kilometre is 1,000 metres.

These prefixes help us to understand measurement facts and how to convert from one unit to another.

