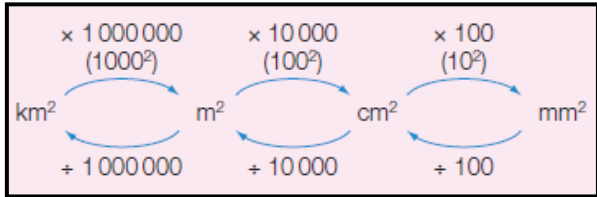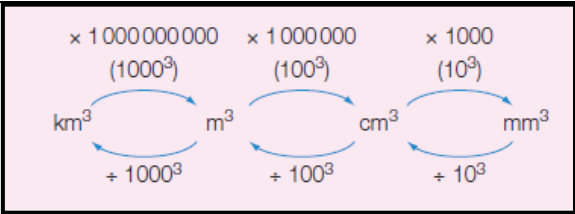# Best Practice #1

$\pi = 3.14159265358...$

AusVELS 8.0	*Students will be able to convert between units of measurement for area and for volume.*

Measurement Conversion for Area

Step 1	Area is measured in square units.	
Step 2	Write the question.	Convert $3.5m^2$ to mm^2
Step 3	Indicate: • $1m = 1000mm$, therefore $1m^2 = 1000^2 mm^2$ • Converting from a larger unit to a smaller unit, so multiply. • Use conversion chart. Multiply by 1000^2 to convert from m^2 to mm^2 *Alternatively:* To convert m^2 to mm^2 • $3.5m^2 = 3.5m \times 1m$ • $3.5m \times 1000 = 3500mm$ • $1m \times 1000 = 1000mm$	3.5×1000^2 $= 3.5 \times 1\,000\,000$ $= 3,500,000mm^2$ *Alternatively:* $3.5m^2 = 3.5m \times 1m$ $= 3500mm \times 1000mm$ $= 3,500,000\ mm^2$
Step 4	Write the answer.	$3.5m^2 = 3\,500\,000mm^2$

Measurement Conversion for Volume

Step 1	Volume is measured in cubic units.	
Step 2	Write the question.	Convert $37000m^3$ to km^3
Step 3	Indicate: • $1km = 1000m$, therefore $1km^3 = 1000\ m^3$ • Converting from a smaller unit to a larger unit, so divide. • Use conversion chart. Divide by 1000^3 to convert from m^3 to km^3	$37000 \div 1000^3$ $= 37000 \div 1\,000\,000\,000$ $= 0.000\,037km^3$

Measurement and Geometry

Craigieburn Secondary College

$\pi = 3.14159265358979323846...$

	$\times 1\,000\,000\,000$ (1000^3) $\times 1\,000\,000$ (100^3) $\times 1000$ (10^3) $km^3 \rightarrow m^3 \rightarrow cm^3 \rightarrow mm^3$ $\div 1000^3$ $\div 100^3$ $\div 10^3$	
Step 4	Write the answer with the correct units. Calculator presentation of answers- standard notation. Write answer in standard notation.	$37000m^3 = 0.000\,037km^3$ $3.7 \times 10^{-5}\ km^3$

Measurement and Geometry