Metric and imperial measures (mathematical) Metric and imperial measures (mathematical)

Solving problems

Challenge

Measure the length, mass and/or capacity of the objects collected, using metric measures.

Then use the table to convert the metric measures to imperial measures.

Metric to imperial conversion table

Multiply	by	to obtain
centimetres	0.39	inches
metres	3.28	feet
metres	1-09	yards
kilometres	0-62	miles
grams	0.04	ounces
kilograms	2.2	pounds
millilitres	0.04	fluid ounces
litres	1.75	pints
litres	0.22	gallons

You will need:

- various classroom objects to measure
- measuring equipment (metric and imperial)

Think about ...

Be sure to measure each object as accurately as possible.



Think carefully about how to use the conversion tables when converting mixed units such as 2m 35cm or $2\frac{1}{2}$ kg.

What if?

Imperial to metric conversion table

Multiply	by	to obtain
inches	2.54	centimetres
feet	0.3	metres
yards	0.91	metres
miles	1.61	kilometres
ounces	28-35	grams
pounds	0-45	kilograms
fluid ounces	28-41	millilitres
pints	0.57	litres
gallons	4.55	litres

Now collect some different objects to measure.

This time, measure the length, mass and/or capacity of the objects using imperial measures.

Then use this table to convert the imperial measures to metric measures.



When completed, consider:

Could you have calculated the answers in a different way?

Was your method the most efficient?