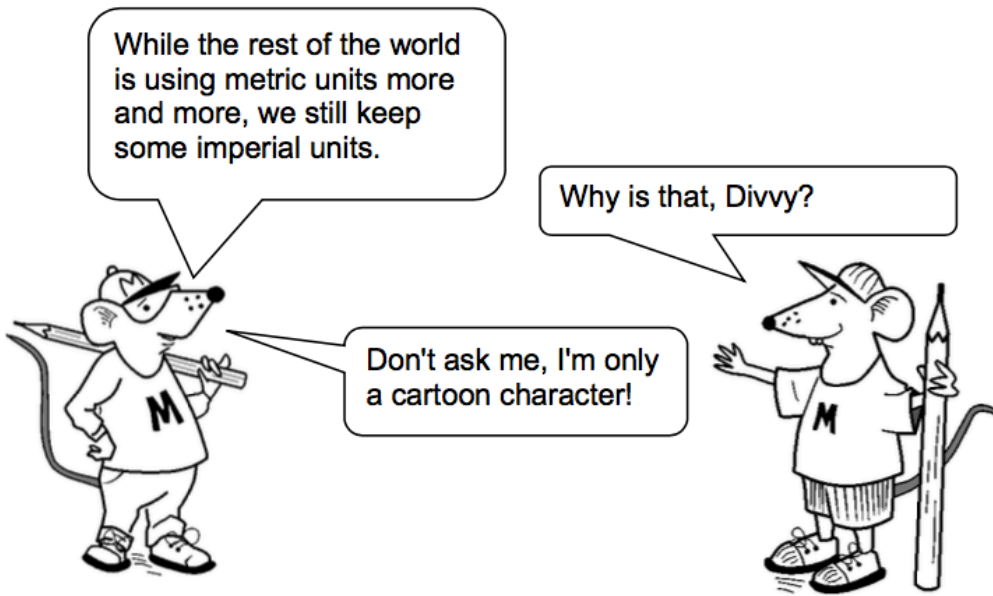


To start with, read through the notes below on imperial and metric units. Then, use the rules you have read on metric units to convert the small units into larger units. When you reach the main task, attempt bar A, B, OR C on each sheet. You can decide which bar of questions you attempt on each sheet depending on how confident you feel.

### Imperial Units



These are the imperial units still in use:

**Mile.**

A mile is a unit of distance and is about 1 600 metres long ( a little over 1.5 km).

**Pint.**

A pint measures capacity (volume) and is about 570ml (a little over half a litre).

**Gallon.**

A gallon is a unit of capacity and is a bout 4.5 litres.

**Foot.**

A foot is a unit of length and is about 30cm long.

**Inch.**

An inch is a unit of length and is about  $2\frac{1}{2}$  cm long.

**Pound.**

A pound is a unit of mass and is about half a kilogram.

### Concepts

Children should know and use the following vocabulary: ***unit, standard unit, metric unit, imperial unit***

***kilometre, metre, centimetre, millimetre, kilogram, gram, litre, millimetre mile, pint, gallon***

***long, short, tall, high, low, wide, narrow, deep, shallow, thick, thin***

***far, near, close, distance, perimeter, circumference***

***big, bigger, small, smaller, balances***

***heavy, light, weighs***

***full, empty, holds***

***longer, longest etc***

Children should be developing a good working knowledge of units in common use, both metric and imperial.

They should know the following abbreviations:

***mm (millimetre), cm (centimetre), m (metre), km (kilometre)***

***g (gram), kg (kilogram), ml (millilitre), l (litre)***

***cm<sup>2</sup> (square centimetre), m<sup>2</sup> (square metre), mm<sup>2</sup> (square millimetre)***

They should know the following relationships between metric units:

1 kilometre = 1 000 metres

1 metre = 100 centimetres or 1 000 millimetres

1 centimetre = 10 millimetres

1 kilogram = 1 000 grams

1 litre = 1 000 millilitres

They should also know common imperial units:

The mile is about 1 600m, a little more than 1.5km

The pint is about 570 ml, a little more than half a litre

The gallon is a little less than five litres.

They should know the equivalent of one half, one quarter, three quarters, one tenth and one hundredth of 1km, 1m, 1 kg, 1 litre respectively in smaller units. e.g. know that one hundredth of a litre is 10 millilitres.

They should begin to write larger units in terms of smaller units.

e.g. 7.5 km is 7 500 m

2.58 m is 258 cm

6 cm is 60 mm.

and vice versa.

You should now be able to write small units as large units and large units as small units.

Try this with the measurements in the table.



	<b>Small units</b>	<b>Large units</b>
e.g.	3 000 g	3 kg
	2 500 g	kg
	cm	5 m
	740 cm	m
	mm	3 m
	7 000 ml	l
	ml	4.5 l
	g	3.8 kg
	583 cm	m
	45 cm	m
	cm	0.84 m
	2 450 mm	m
	m	6 km
	6 320 m	km
	670 m	km

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3 000g	3kg
2 500g	<b>2.5kg</b>
<b>500cm</b>	5m
740cm	<b>7.4m</b>
<b>3 000mm</b>	3m
7 000ml	<b>7 l</b>
<b>4 500ml</b>	4.5 l
<b>3 800g</b>	3.8kg
583cm	<b>5.83m</b>
45cm	<b>0.45m</b>
<b>84cm</b>	0.84m
2 450mm	<b>2.450m</b>
<b>6 000m</b>	6km
6 320m	<b>6.320km</b>
670m	<b>0.670km</b>

# C1 METRIC UNITS OF WEIGHT

I can choose and use metric units to measure weight.

Examples

$1000 \text{ g} = 1 \text{ kg}$

$6000 \text{ g} = 6 \text{ kg}$

$3500 \text{ g} = 3.5 \text{ kg}$

$2600 \text{ g} = 2.6 \text{ kg}$

$9120 \text{ g} = 9.12 \text{ kg}$

$4850 \text{ g} = 4.85 \text{ kg}$

## A

Copy and complete.

1  $3000 \text{ g} = \square \text{ kg}$

2  $1000 \text{ g} = \square \text{ kg}$

3  $6000 \text{ g} = \square \text{ kg}$

4  $4 \text{ kg} = \square \text{ g}$

5  $2 \text{ kg} = \square \text{ g}$

6  $7 \text{ kg} = \square \text{ g}$

7  $2500 \text{ g} = \square \text{ kg}$

8  $3500 \text{ g} = \square \text{ kg}$

9  $5500 \text{ g} = \square \text{ kg}$

10  $6.5 \text{ kg} = \square \text{ g}$

11  $1.5 \text{ kg} = \square \text{ g}$

12  $4.5 \text{ kg} = \square \text{ g}$

Which metric unit would you use to measure the weight of:

13 a light bulb

14 a wardrobe

15 a garden spade

16 a calculator

17 a spoon

18 a dog?



## B

Copy and complete.

1  $8600 \text{ g} = \square \text{ kg}$

2  $2400 \text{ g} = \square \text{ kg}$

3  $800 \text{ g} = \square \text{ kg}$

4  $3.1 \text{ kg} = \square \text{ g}$

5  $1.2 \text{ kg} = \square \text{ g}$

6  $9.7 \text{ kg} = \square \text{ g}$

7  $5300 \text{ g} = \square \text{ kg}$

8  $7100 \text{ g} = \square \text{ kg}$

9  $6400 \text{ g} = \square \text{ kg}$

10  $2.9 \text{ kg} = \square \text{ g}$

11  $8.3 \text{ kg} = \square \text{ g}$

12  $0.7 \text{ kg} = \square \text{ g}$

Which metric unit would you use to measure the weight of:

13 a set of encyclopaedias

14 an egg

15 a piano

16 a telephone?

17 Think of three things with a weight of about:

a) 1 g

b) 100 g

c) 1 kg.

## C

Copy and complete.

1  $3160 \text{ g} = \square \text{ kg}$

2  $390 \text{ g} = \square \text{ kg}$

3  $4620 \text{ g} = \square \text{ kg}$

4  $8.08 \text{ kg} = \square \text{ g}$

5  $2.75 \text{ kg} = \square \text{ g}$

6  $5.47 \text{ kg} = \square \text{ g}$

7  $1940 \text{ g} = \square \text{ kg}$

8  $6160 \text{ g} = \square \text{ kg}$

9  $7530 \text{ g} = \square \text{ kg}$

10  $0.22 \text{ kg} = \square \text{ g}$

11  $2.31 \text{ kg} = \square \text{ g}$

12  $9.85 \text{ kg} = \square \text{ g}$

Copy and complete each sentence by choosing the best estimate.

13 At birth many babies have a mass of about (0.35 kg, 3.5 kg, 35 kg).

14 One pound coins have a mass of about (1 g, 10 g, 100 g).

15 Many footballers weigh about (70 kg, 700 kg, 7000 kg).

16 A tin of beans has a mass of about (0.004 kg, 0.04 kg, 0.4 kg).

I can choose and use metric units of capacity.

Examples

$1000 \text{ ml} = 1 \text{ litre}$

$4000 \text{ ml} = 4 \text{ litres}$

$2500 \text{ ml} = 2.5 \text{ litres}$

$1900 \text{ ml} = 1.9 \text{ litres}$

$3170 \text{ ml} = 3.17 \text{ l}$

$2680 \text{ ml} = 2.68 \text{ l}$

### A

Copy and complete.

- 1 2000 ml =  litres
- 2 5000 ml =  litres
- 3 1000 ml =  litre
- 4 3 litres =  ml
- 5 4 litres =  ml
- 6 8 litres =  ml
- 7 6500 ml =  litres
- 8 500 ml =  litres
- 9 7500 ml =  litres
- 10 3.5 litres =  ml
- 11 1.5 litres =  ml
- 12 9.5 litres =  ml

Which metric unit would you use to measure the capacity of:

- 13 a washing machine
- 14 a spoonful of medicine
- 15 an eyebath
- 16 a paddling pool
- 17 a stream
- 18 a bottle of nail varnish?



### B

Copy and complete.

- 1 4300 ml =  litres
- 2 1700 ml =  litres
- 3 900 ml =  litres
- 4 7.1 litres =  ml
- 5 2.6 litres =  ml
- 6 5.3 litres =  ml
- 7 9200 ml =  litres
- 8 6700 ml =  litres
- 9 3800 ml =  litres
- 10 1.4 litres =  ml
- 11 2.1 litres =  ml
- 12 0.3 litres =  ml

Which metric unit would you use to measure the capacity of:

- 13 a hot water tank
- 14 a sachet of vinegar
- 15 a water pistol
- 16 a glass of orange
- 17 a swamp
- 18 a fire extinguisher?



### C

Copy and complete.

- 1 3530 ml =  litres
- 2 860 ml =  litres
- 3 2290 ml =  litres
- 4 5.01 litres =  ml
- 5 2.6 litres =  ml
- 6 7.12 litres =  ml
- 7 1580 ml =  litres
- 8 6940 ml =  litres
- 9 4310 ml =  litres
- 10 2.07 litres =  ml
- 11 5.63 litres =  ml
- 12 0.74 litres =  ml

Choose the best estimate.

- 13 a squeezey lemon  
0.015 l, 0.15 l, 1.5 l
- 14 a fish tank  
100 ml, 1000 ml, 10 000 ml
- 15 an ink bottle  
0.03 l, 0.3 l, 3 l
- 16 a car's petrol tank  
40 l, 400 l, 4000 l
- 17 a bottle of salad dressing  
2.5 ml, 25 ml, 250 ml
- 18 a bath  
10 l, 100 l, 1000 l