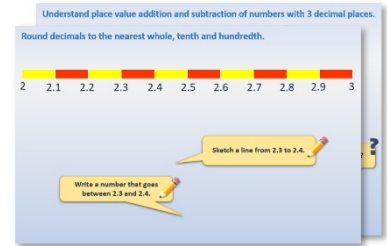


Week 6, Day 1

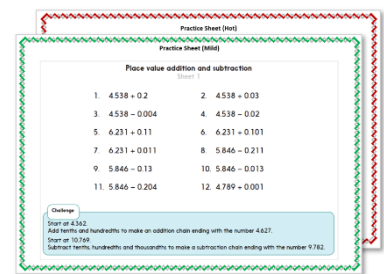
Weight and capacity

Each day covers one maths topic. It should take you about 1 hour or just a little more.

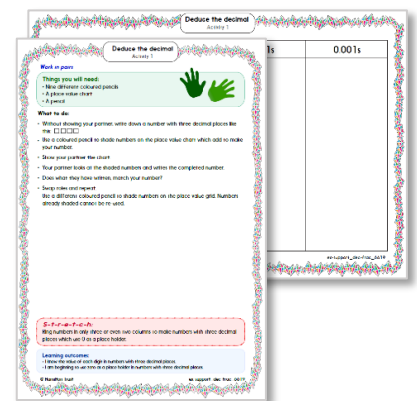
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



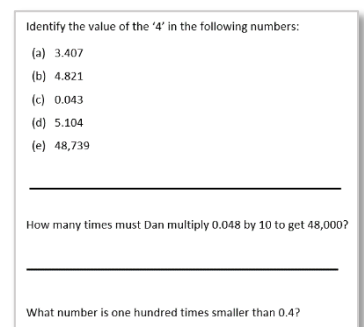
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



4. Have I mastered the topic? A few questions to **Check your understanding**. Fold the page to hide the answers!



Learning Reminders

Convert between grams and kilograms.

? How else can we write one kilogram?

Remember that 'kilo' means 1000 (as in kilometre = 1000m).

1kg

1000g

0

Write these in order, lightest to heaviest. If the amount written is in grams write the same amount in kilograms and vice versa if the amount is in kilograms.

1/2 kg, 250g, 0.7kg, 785g, 100g, 0.458kg

0.2kg, 300g, 0.9 kg, 500g, 0.4kg, 0.678kg

Convert between grams and kilograms.

100g	0.1kg
200g	0.2kg
250g	0.25kg
300g	0.3kg
400g	0.4kg
458g	0.458kg
500g	1/2kg
678g	0.678kg
700g	0.7kg
785g	0.785kg
800g	0.8kg

Learning Reminders

Convert between millilitres and litres.

Just as weights can be written two ways, so can other measures.

How else can we write two litres? ?

0

2000ml

2 litres

Write these in order, least to greatest. If the amount written is in millilitres write the same amount in litres and vice versa if the amount is in litres.

1000ml 0.5 l 1500ml 1.9 l 1100ml

1.6 l 1.25 l 1700ml 1.425 l 1300ml 1875ml

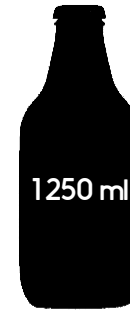
Convert between millilitres and litres.

500ml	0.5 l
1000ml	1 l
1100ml	1.1 l
1250ml	1.25 l
1300ml	1.3 l
1425ml	1.425 l
1500ml	1.5 l
1600ml	1.6 l
1700ml	1.7 l
1875ml	1.875 l
1900ml	1.9 l

Practice Sheet Mild

Converting between millilitres and litres

Convert the capacities written in litres to millilitres, and vice versa.



Challenge

Write all the capacities in order, from least to greatest.

Practice Sheet Hot

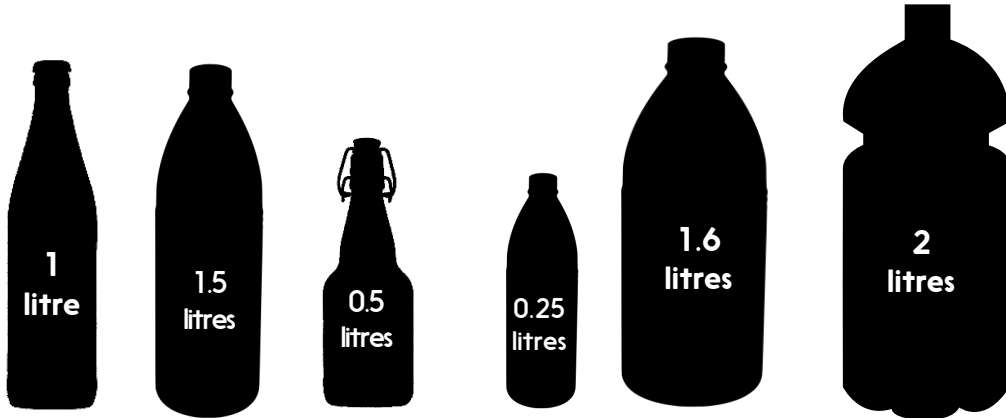
Ordering mass

Put these masses in order from lightest to heaviest.

The image contains 12 trapezoidal boxes, each containing a mass value. The values are: 1900g, 925g, 0.2kg, 0.8kg, 1.4kg, 1kg, 1.275kg, 2kg, 0.729g, 1.75kg, 1649g, 275g, and 1200g.

Practice Sheets Answers

Converting between millilitres and litres (mild)



1000 ml, 1500 ml, 500 ml, 250 ml, 1600 ml, 2000 ml



0.9 l, 0.168 l, 1.25 l, 0.1 l, 0.75 l, 0.2 l

Challenge

Capacities in order:

100 ml, 168 ml, 200 ml, 250 ml, 500 ml, 750 ml
900 ml, 1000 ml, 1250 ml, 1500 ml, 1600 ml, 2000 ml

Ordering mass (hot)

Lightest to heaviest:

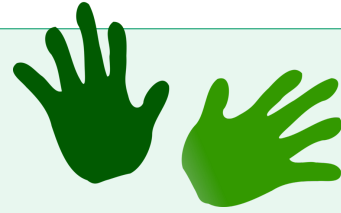
0.2kg
275g
0.729kg
0.8kg
925g
1kg
1200g
1.275kg
1.4kg
1649g
1.75kg
1900g
2kg

A Bit Stuck? Decimals measure up

Work in pairs

Things you will need:

- Kitchen scales
- Items weighing between 100g and 2kg
- Measuring jug
- Three containers
- A jug of water
- Washing up bowl
- A pencil



What to do:

- Weigh an item. Write down the name of the item and its weight in three ways: as kilograms and grams (if it weighs more than 1kg), in kilograms only and in grams only.
- Repeat with at least two more items.

Lunchbox	1kg 125g	1.125kg	1125g
Pencil case	350g	0.35kg	
PE bag			
Water bottle	450ml	0.45litres	

- Place a container in the washing up bowl. Fill the container with water. Empty the water into the measuring jug. Write the name of the container and its capacity in two ways: millilitres only and litres only.
- Repeat for two other containers.

S-t-r-e-t-c-h:

Write the following weights in order from lightest to heaviest:

2.3kg, 700g, 2.125g, 1900g

Learning outcomes:

- I can convert between grams and kilograms (to three decimal places).
- I can convert between millilitres and litres (to three decimal places).
- I am beginning to order weights written in mixed units.

Check your understanding

Questions

True or false?

- 10 lots of 100 grams are 10 kilograms
- One tenth of a litre is 10ml
- $1.6\text{kg} > 1489\text{g}$
- $1500\text{ml} < 1.275\text{ litres}$
- $\frac{1}{4}\text{kg} = 250\text{g}$
- $\frac{3}{4}\text{ litres} = 75\text{ml}$

Write a mass in grams which is between 2.5kg and 2.6kg.

Write a capacity in litres which is between 3000ml and 3100ml.

Fold here to hide answers

Check your understanding

Answers

True or false?

- 10 lots of 100 grams are 10 kilograms **False, it is 1 kilogram (1000 not 100 grams = 1 kilogram).**
- One tenth of a litre is 10ml **False, it is 100ml since 1000ml = 1 litre.**
- $1.6\text{kg} > 1489\text{g}$ **True, 1600g > 1489g**
- $1500\text{ml} < 1.275\text{ litres}$ **False, 1500ml > 1275ml**
- $\frac{1}{4}\text{kg} = 250\text{g}$ **True**
- $\frac{3}{4}\text{ litres} = 75\text{ml}$ **False as $\frac{3}{4}\text{ litres} = 750\text{ml}$**

Write a mass in grams which is between 2.5kg and 2.6kg. **Accept any mass between 2500g and 2600g.**

Write a capacity in litres which is between 3000ml and 3100ml. **Accept any capacity between 3 litres and 3.1 litres, e.g. 3.075 litres.**