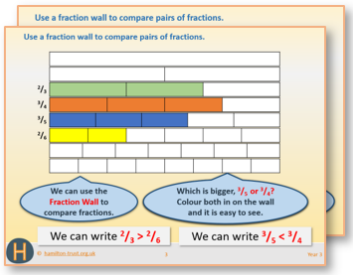
Week 14, Day 4

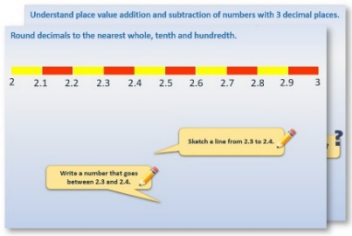
Convert between metric units.

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

1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.



   OR start by carefully reading through the **Learning Reminders**.



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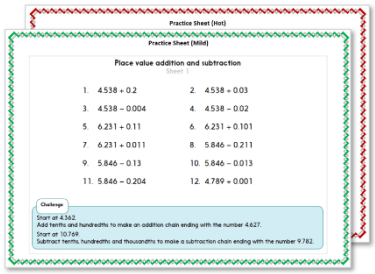
2. Tackle the questions on the **Practice Sheet**.
   There might be a choice of either Mild (easier) or Hot (harder)!
   Check the answers.



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

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4. Think you've cracked it? Whizzed through the Practice Sheets?
   Have a go at the **Investigation**…

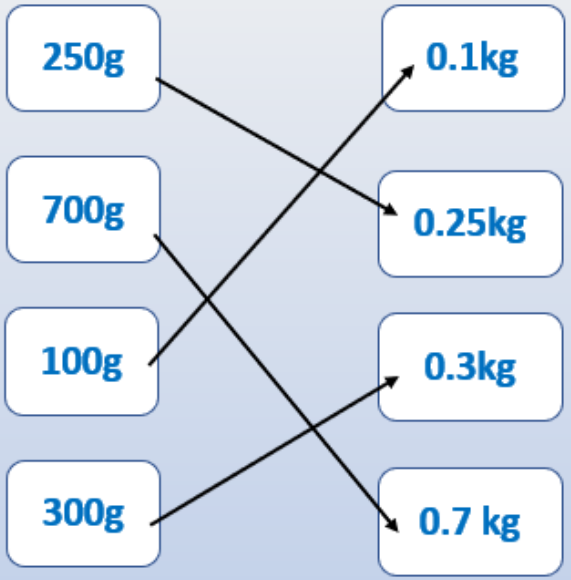
Learning Reminders

Convert between grams and kilograms, millilitres and litres, metres and kilometres.

1 kilogram = 1000 grams.

Remember that 'kilo' means 1000.

Check the way the grams and kilograms have been paired up.



Learning Reminders

Convert between grams and kilograms, millilitres and litres, metres and kilometres.

1 litre = 1000 millilitres.

Remember that 'milli' means 1000th.

Draw arrows to pair up the litres and millilitres.

0.5 l	800ml
1.9 l	500ml
1.2 l	1200ml
0.8 l	1900ml

Watch out! Don't mistake the 'l' for litres for a 1!

We have to multiply the number of litres (left-hand numbers) by 1000 to find the number of millilitres.

Answers

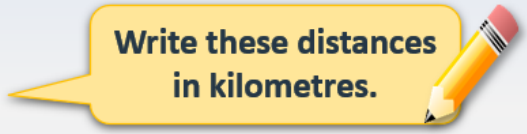
0.5 l = 500ml
1.9 l = 1900ml
1.2 l = 1200ml
0.8 l = 800ml

Learning Reminders

Convert between grams and kilograms, millilitres and litres, metres and kilometres.

1 kilometre = 1000 metres.

Write these distances in kilometres.



1100m	2500m	800m	1250m

We have to divide each by 1000.
1100 divided by 1000 is 1.1,
so, 1100 metres is 1.1 kilometres.

Now divide the others by 1000…

Answers

1100m = 1.1km
2500m = 2.5km
800m = 0.8km
1250m = 1.25km

Practice Sheet Mild

Converting between millilitres and litres

Record the capacities of each of these bottles in litres and in millilitres, converting between each unit.

1. 

1 litre

2. 

800ml

3. 

200ml

4. 

1.5l

5. 

0.5l

6. 

100ml

7. 

0.4l

8. 

600ml

9. 

1900ml

Practice Sheet Hot

Converting between millilitres and litres

Record the capacities of each of these bottles in litres and in millilitres, converting between each unit.

1.

1 litre

2.

800ml

3.

200ml

4.

1.5l

5.

0.5l

6.

100ml

7.

0.4l

8.

600ml

9.

1900ml

10.

1.8l

11.

1.2l

12.

2 litres

Challenge

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

Practice Sheet Answers

Practice Sheet (Mild)

1 litre = 1000 millilitres
800 ml = 0.8 litres
200 ml = 0.2 litres
1.5 litres = 1500 millilitres
0.5 litres = 500 millilitres
100 ml = 0.1 litres
0.4 litres = 400 millilitres
600 ml = 0.6 litres

Practice Sheet (Hot)

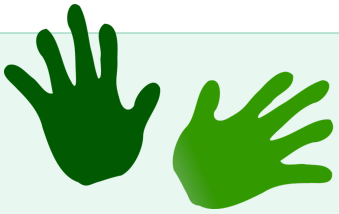
1 litre – 1000 millilitres
800 ml – 0.8 litres
200 ml – 0.2 litres
1.5 litres – 1500 millilitres
0.5 litres – 500 millilitres
100 ml – 0.1 litres
0.4 litres – 400 millilitres
600 ml – 0.6 litres
1900 ml = 1.9 litres
1.8 litres = 1800 millilitres
1.2 litres = 1200 millilitres
2 litres = 2000 millilitres

Challenge: The correct order is: 100 ml, 200 ml, 0.4 litres, 0.5 litres, 600 ml, 800 ml, 1 litre, 1.2 litres, 1.5 litres, 1.8 litres, 1900 ml, 2 litres

A Bit Stuck?
Baby weigh-in

Work in pairs

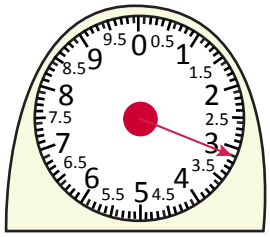
Things you will need:
- Baby's weight table
- A pencil



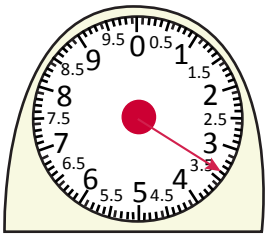
What to do:

- Read the baby's weight at each age.
  Write each weight in your own copy of the table.

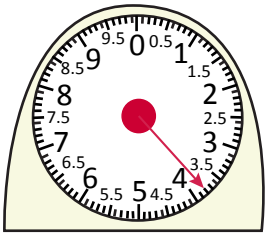
At birth



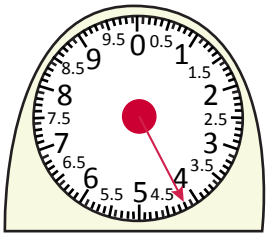
1 month old



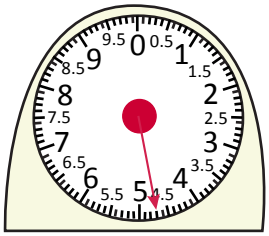
2 months old



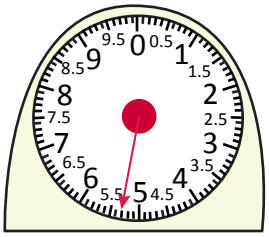
3 months old



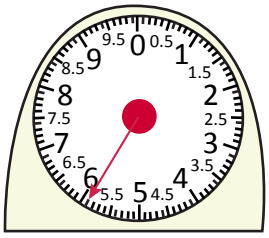
4 months old



5 months old



6 months old



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

How much weight did the baby put on between each weigh-in?

Learning outcomes:
- I can read scales marked in steps of 0.1kg.
- I am beginning to count up to find a difference between multiples of 0.1kg.

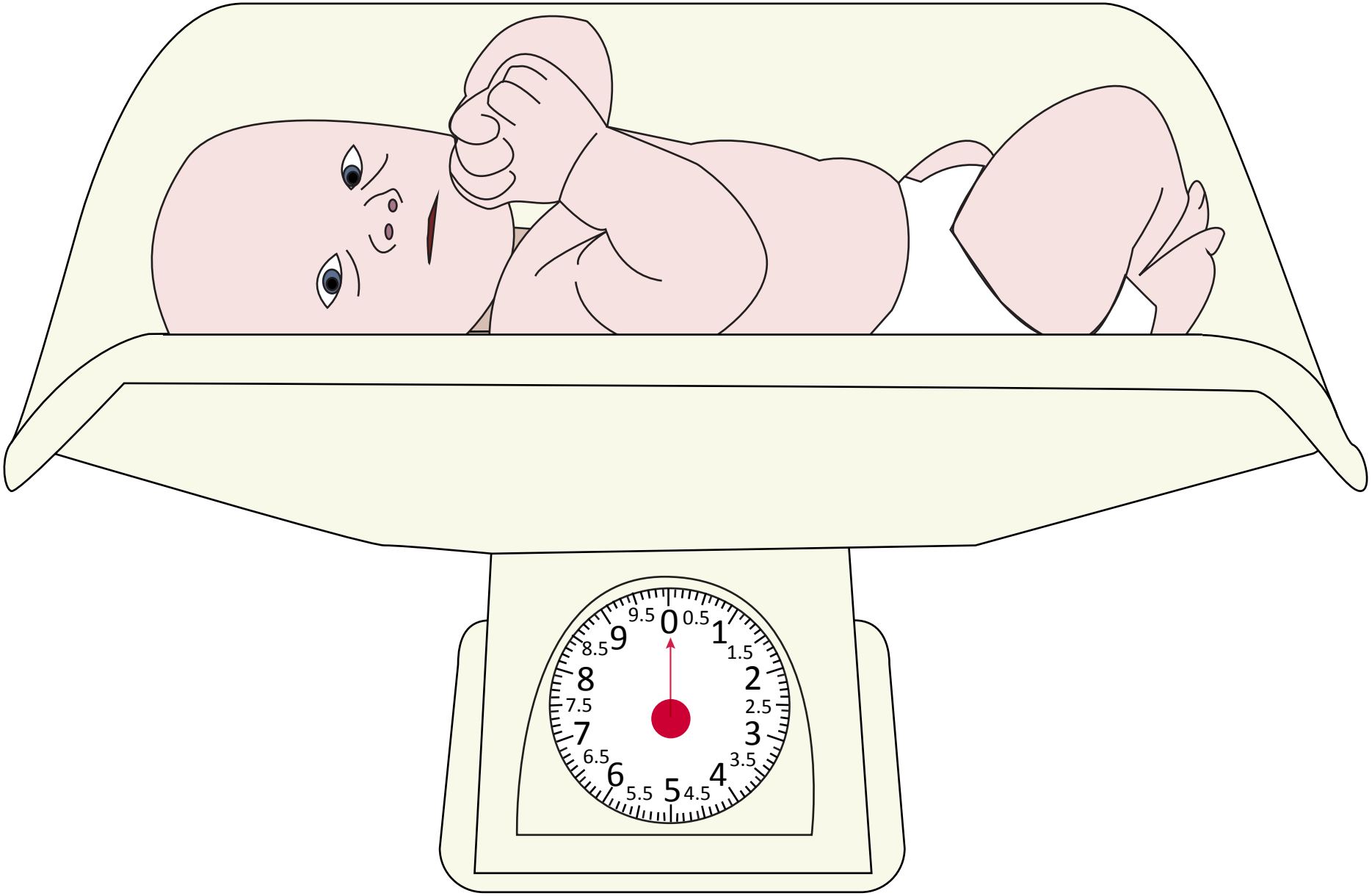
A Bit Stuck?

Baby weigh-in

Baby's age	Weight
At birth	
1 month	
2 months	
3 months	
4 months	
5 months	
6 months	

A Bit Stuck?

Baby weigh-in



Investigations
Investigating metric conversions

Activity 1

- Cut out all of the twenty-four cards. Put aside the two blanks.
- Mix up the cards and lay them out randomly face-up in front of you.
- Pair up the cards as quickly as you can.
  Aim for less than 5 minutes!
- There should be two cards left over.
- Use the two blank cards to write their equivalent – kilograms for grams or grams for kilograms.
- Mix up all the cards and try to beat your time to pair them all.

Activity 2

- Sort the cards into kilograms and grams.
- Choose the grams and put the kilograms aside.
- Using your set, write the twelve weights in order in a list, from lightest to heaviest.
- Now, beside each weight, write the equivalent number of kilograms.
- Now use the kilogram cards to check that you have got them all right!

Challenge

Create a new set of 24 cards...

› On twelve of them write a length in kilometres.
› On the other twelve write the equivalent lengths in metres.
› Mix up the cards and try the activities with your new set of cards!

Place value

0.3kg	4300g	0.1kg	0.9kg
3.9kg	700g	2.4kg	500g
1300g	2.1kg	3800g	2700g

Place value

300g	4.3kg	100g	900g
3900g	0.7kg	2400g	0.5kg
1.3kg	2700g		