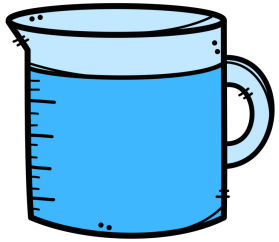
Maths
w/c 06.07.2020



This week you will be learning more about measuring. You will be measuring litres and also measuring temperature and time! Your lessons are linked to the videos at www.whiterosemaths.com.

Some of the things you will learn about are new and some we have already looked at in class, but, as you are all incredible learners, I know that you will try your best and produce amazing work. To help you, there are some 'Learn Screens' and key skill activities to look at along the way.

Please note: If the links to the websites mentioned don't work, please type them into your web browser.

We ❤ Maths

We practise and explore.
We have a go.
We make mistakes and learn from them.
We talk about what we are doing.
We think about what we are doing.
We write about what we are doing.
We say ‘I can’t do that yet’.
We don’t waste time.
We celebrate our efforts.
We keep going when it is difficult.

What will you do this week?

Don't forget to start your maths work with the '**Daily Revision**' activities **on pages 4 – 10. This week there are some more games to practise your key skills as well as some mental maths questions on Friday.**

Lesson 1: Measuring in litres

Lesson 2: Measuring temperature

Lesson 3: Telling the time – o'clock and half past

Lesson 4 : Telling the time – quarter to and quarter past

Lesson 5: Test your skills

There are some additional activities for you to try for some of the lessons and lots of Learn Screens to help you along the way.

Daily Fluency and Recall Tasks

Challenge:

Choose a number sentence from any times table and write the fact family

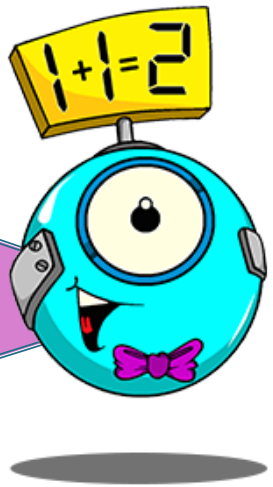
e.g.

2 x5= 10

5x 2 = 10

10 ÷2 = 5

10÷5 =2



Try to learn your:

2 times table

5 times table

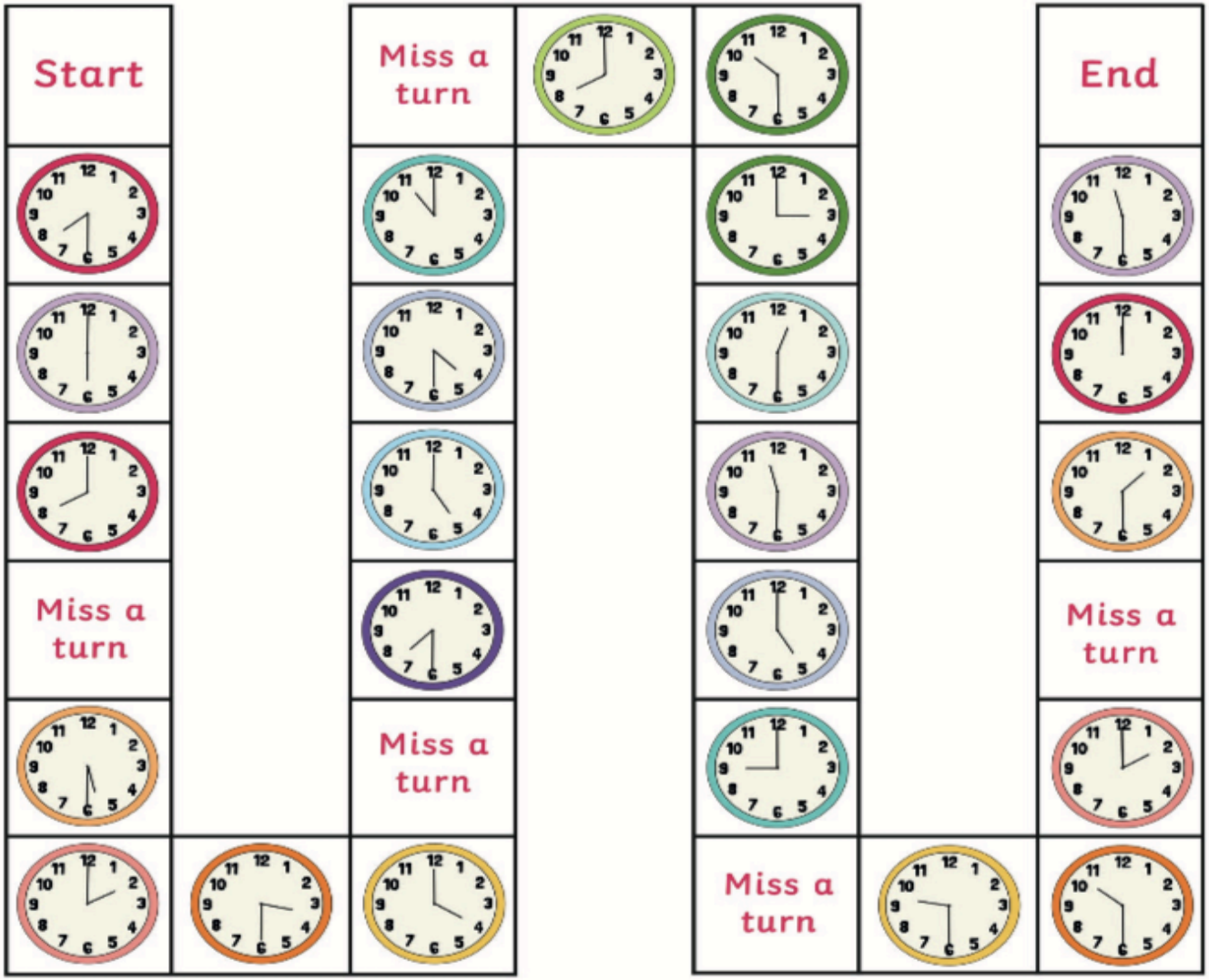
10 times table

3 x table

Why not try Hit the button at https://www.topmarks.co.uk/maths-game/hit-the-button
You could practise your number bonds, division facts and doubles/ halves as well.

It's really important that you practise your times tables every day as they will help you with lots of the maths you will meet in KS2.

Monday Revision



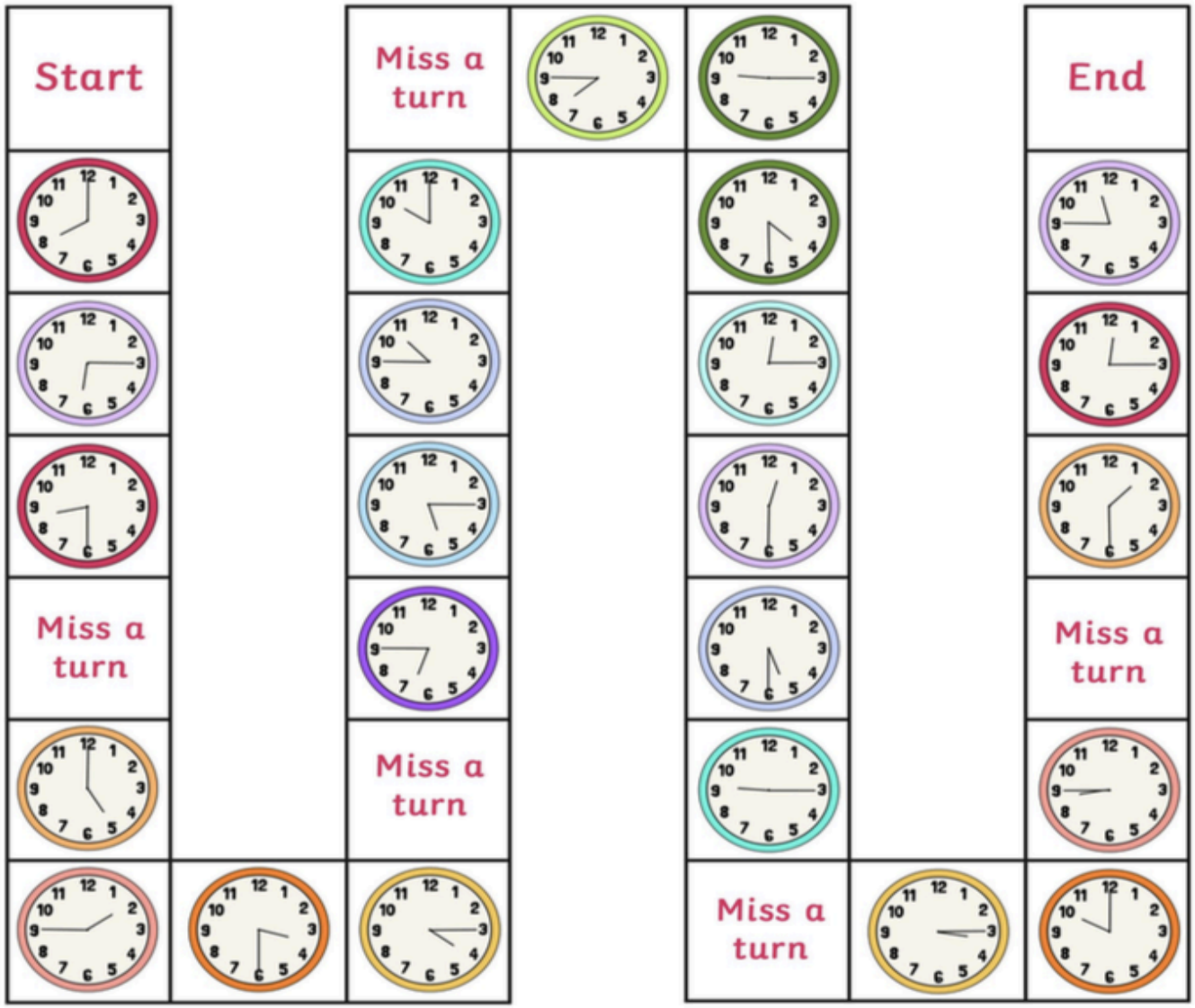
Telling the Time Board Game

What time is it?

Roll a dice, move the number of spaces shown and read aloud the time shown on the clock. The first player to complete the board wins!

Use this game to practise telling the time using o'clock and half past.

Tuesday Revision

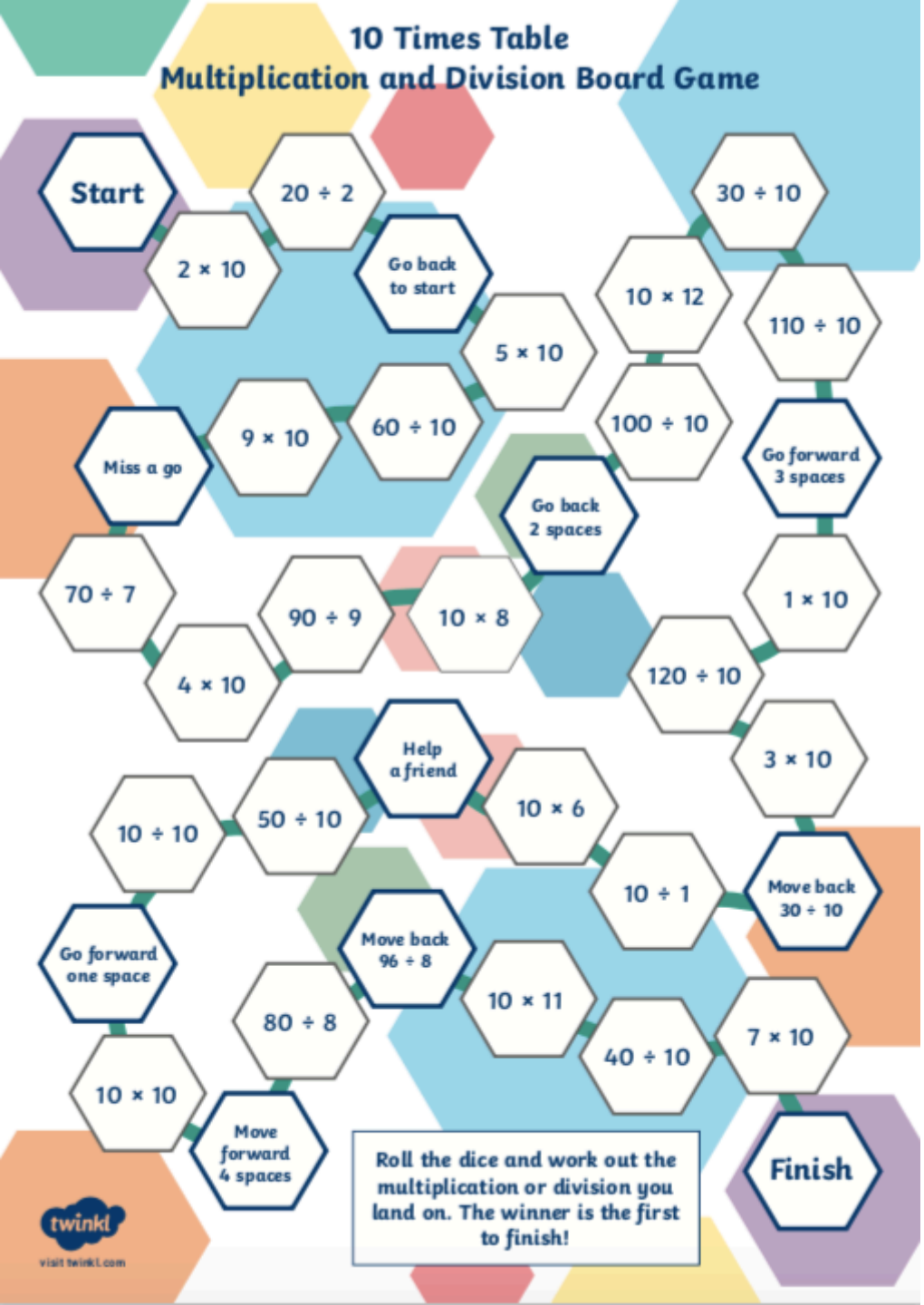


Telling the Time Board Game

What time is it?

Roll a dice, move the number of spaces shown and read aloud the time shown on the clock. The first player to complete the board wins!

Use this game to practise telling the time using o'clock, half past, quarter to and quarter past.



Wednesday Revision

How quickly can you finish the game?
You can play this with a friend or just work out the answers yourself!

Three in a

Equipment – 3 dice and 2 sets of coloured counters

How to Play – Take turns to throw the dice. Add up the amount and cover a matching square with a counter. The first to get three counters in a row wins. The row may be vertical, hoizontal or diagonal. If your number is already taken you miss a turn.

15	13	18	10	12
11	9	16	5	17
6	17	11	14	15
13	7	8	18	10
12	14	9	11	16

Thursday Revision

If you haven't got 3 dice, just write the numbers 1 to 6 on pieces of paper and pop them in a pot. Do this 3 times. Then just pick out 3 pieces of paper each time!

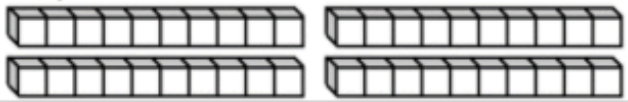
Friday

1)	10 plus 8	
2)	Circle all the even numbers. 17 15 8 9 11 10	
3)	What is the next number: 5, 7, 9, 11, 13, ___	
4)	Write the number forty-five.	
5)	Tick the triangle. 	
6)	How much money? 	p
7)	I have £12. I spend £8. How much money do I have left?	
8)	13 subtract 0	
9)	What number comes after 69?	
10)	A toy car costs £7. How much do two cars cost? 	£
11)	The date is 26th June. What was the date three days ago?	June
12)	How many cubes? 	

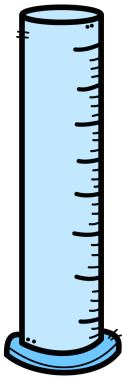
After your amazing success with our mental maths questions last week, here are a few more to try out. Good luck!

Friday

Answers

1)	10 plus 8	**18**
2)	Circle all the even numbers. 17 15 (8) 9 11 (10)	
3)	What is the next number: 5, 7, 9, 11, 13, ___	**15**
4)	Write the number forty-five.	**45**
5)	Tick the triangle. 	
6)	How much money? 	**14p**
7)	I have £12. I spend £8. How much money do I have left?	**£4**
8)	13 subtract 0	**13**
9)	What number comes after 69?	**70**
10)	A toy car costs £7. How much do two cars cost? 	**£14**
11)	The date is 26th June. What was the date three days ago?	**23rd June**
12)	How many cubes? 	**40**

This Week



This week we will be learning how to measure litres and temperature. We will also revise telling the time using o'clock, half past, quarter to and quarter past.

Our lessons will be linked to the videos at www.whiterosemaths.com **Year 2 Week 11 Lessons 1-4.**

Check out the Learn Screens that will help you complete the tasks.

I know you will be amazing and I can't wait to see what you do.

Please note: If the links to the websites mentioned don't work, please type them into your web browser.

Key Knowledge

Mass, Capacity and Temperature

Knowledge Organiser

Capacity

Capacity is the amount of liquid a container can hold.

Volume is how much liquid is in the container.

Millilitres

We can use a measuring cylinder to measure very small volumes.

We measure these in millilitres. We write this as ml.

1000ml = 1l

Litres

We can use a jug to measure larger volumes.

We measure these in litres. We write this as l.

1000ml = 1l

quarter full

half full

full

25ml < 250ml

10l > 2l

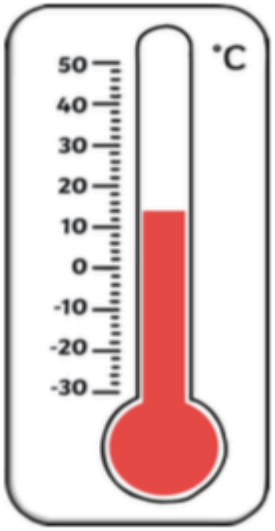
Temperature

Temperature is a measure of heat.

Thermometers are used to measure temperature.

We usually measure temperature in **degrees Celsius (˚C)** but some parts of the world use degrees Fahrenheit (˚F).

We can measure the temperature of air, liquids or objects using a thermometer.



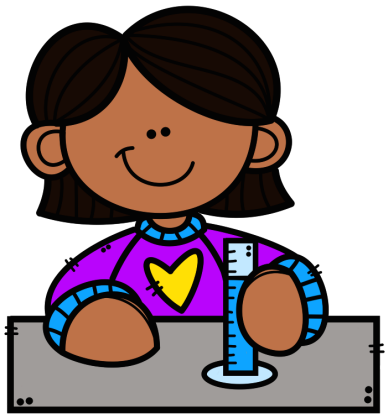
Most thermometers have small tubes and a bulb of liquid at the bottom. The hotter the temperature, the higher the liquid from the bulb rises in the tube. There are markings along the side of the glass tube that show the temperature.

Lesson 1

All about litres

This lesson is all about measuring in litres.

Look at the Learn Screens, and then complete the '**Have a Go**!' activities on page 19. After that go to: White Rose Maths Home Learning Year 2. Click on **Year 2 Summer Term Week 11 lesson 1**. After you've watched the whole video, complete the tasks on pages 21 and 22. There's also a challenge task on page 23 for you to try if you want to.



Learn Screen

Time to review

Let's revisit what we should know

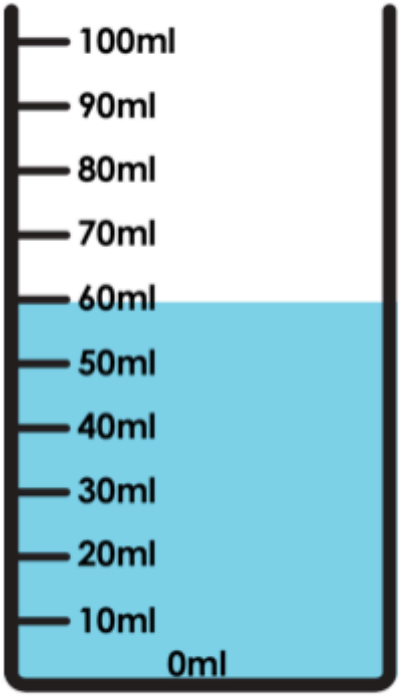
The amount a container can hold is called its capacity.

The amount of liquid in a container is called its volume.

Learn Screen

Time to review

Let's revisit what we should know…



What is the capacity of the measuring cylinder?

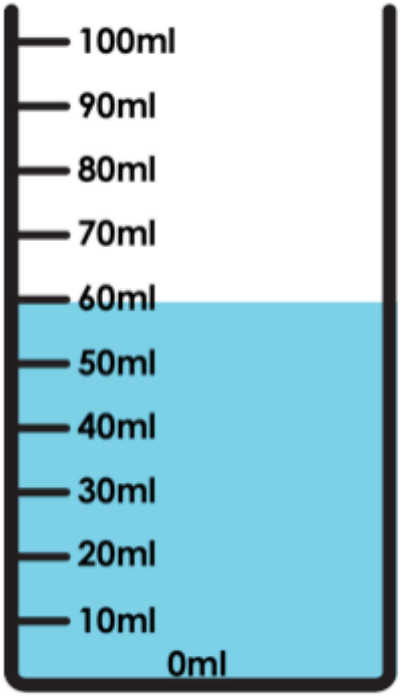
What is the volume of liquid in the measuring cylinder?

Learn Screen

Time to review

Talk about the difference between capacity and volume with your grown up.

Let's revisit what we should know...



What is the capacity of the measuring cylinder?

The capacity is 100ml

What is the volume of liquid in the measuring cylinder?

The volume is 60ml

Learn Screen

Time to review

Capacity

is a measure of how much a container can hold.

Measuring spoons or measuring jugs can be used to measure capacity

Capacity is measured in millilitres (ml) and litres (l). 1 l = 1000 ml

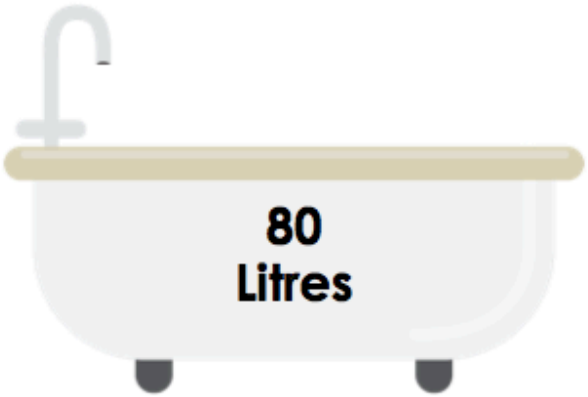
Learn Screen

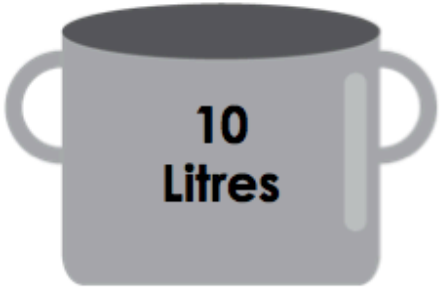
All about litres

Let's learn

Another standard unit to measure capacity is called a litre (l).

Litres are used to measure larger containers.





Have a go!

FLUENCY 1

Use the word larger or smaller to complete the stem sentence.

Use litres to measure the capacity of _____ containers.

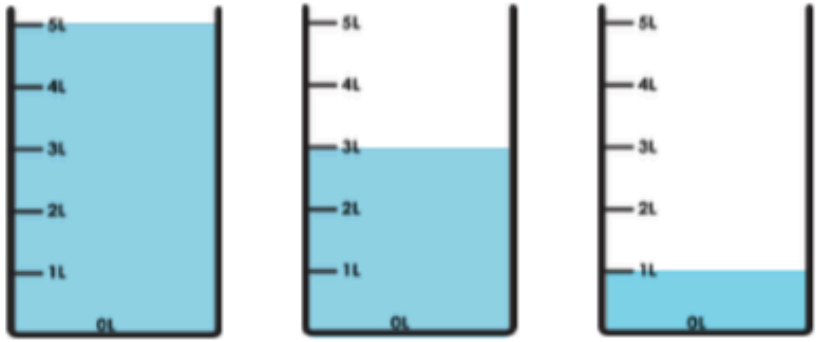
FLUENCY 2

Tick the correct unit of measure for each liquid.

Liquid	Millilitres	Litres
Amount of water in a bath		
Amount of juice in your glass		
Amount of toothpaste to use on a toothbrush		
Amount of water in a watering can		

FLUENCY 3

Match up the measuring jug with the description.



2 litres of water was poured in then 3 more litres were added.

2 litres of water was poured in half of it was used.

4 litres of water was poured in then 1 litre was spilt.

Answers

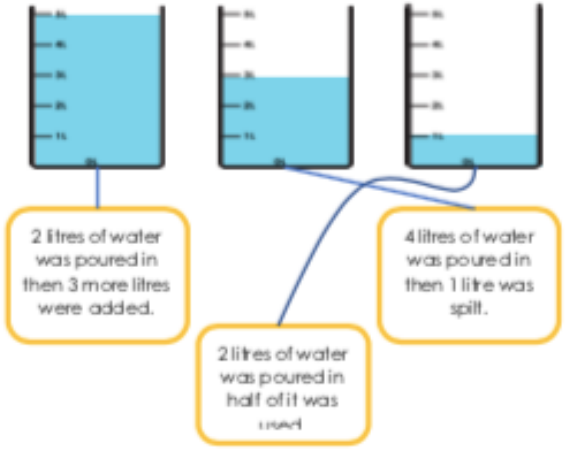
Fluency 1

Use litres to measure the capacity of larger containers.

Fluency 2

Liquid	Millilitres	Litres
Amount of water in a bath		✓
Amount of juice in your glass	✓	
Amount of toothpaste to use on a toothbrush	✓	
Amount of water in a watering can		✓

Fluency 3



Your Task

1 How much water is in each bucket?

a)

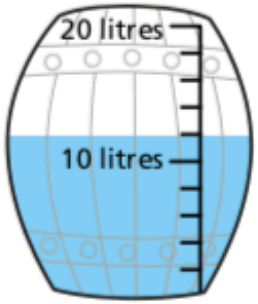
b)

☐ l ☐ l

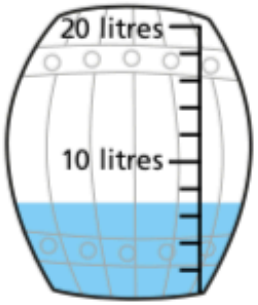
2 Each of these barrels holds 20 l.

How much water is in each barrel?

a)



b)

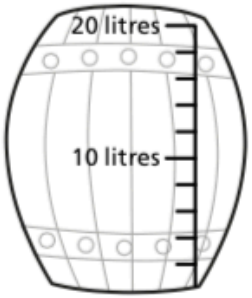


☐ l ☐ l

3 Tommy has 3 full buckets of water.

Each bucket contains 5 l of water.

Tommy pours all the water into the barrel.



Show where the water will reach in the barrel.

Your Task

4 Milk is sold in 5 l and 2 l cartons.

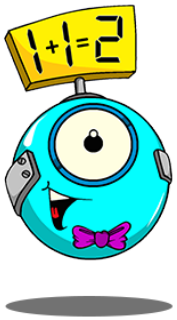
How much milk is there altogether?

a)

b)

l

5 Tick the cartons to show 36 l of milk.



Can you make up a similar problem for a friend to answer?

Spot the mistake!

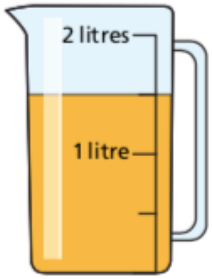
Liquid	Millilitres	Litres
Water in the bath		✓
Medicine in a teaspoon		✓
Shampoo in a bottle	✓	

Find, explain and correct the mistake made.

Time for a challenge!

6 Eva fills a measuring jug with juice.
The jug holds 2 l when full.

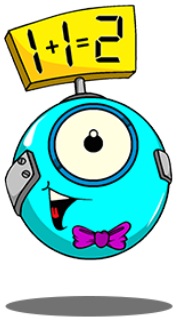
I have one and a half litres of juice.



Do you agree with Eva? _____

Explain your answer.

True or False?



Litres are a smaller measure of capacity than millilitres.

Explain your reasoning.

Answers

pages 21 and 22

1 How much water is in each bucket?

a)

3 l

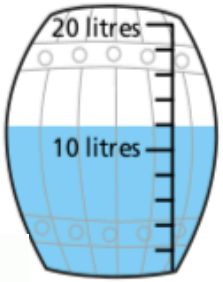
b)

5 l

2 Each of these barrels holds 20 l.

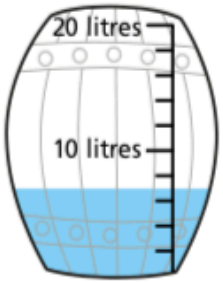
How much water is in each barrel?

a)



12 l

b)

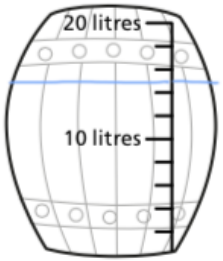


7 l

3 Tommy has 3 full buckets of water.

Each bucket contains 5 l of water.

Tommy pours all the water into the barrel.



Show where the water will reach in the barrel.

4 Milk is sold in 5 l and 2 l cartons.

How much milk is there altogether?

a)

20 l

b)

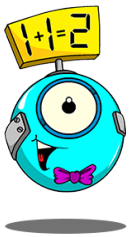
12 l

5 Tick the cartons to show 36 l of milk.

e.g.

Answers

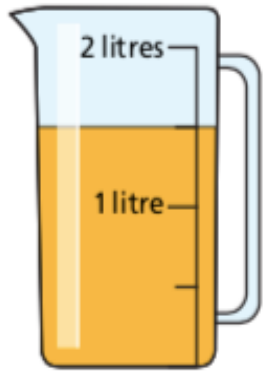
page 23



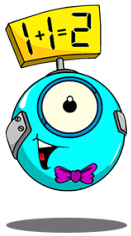
The capacity of the jug is 2L. Eva has poured in one and a half litres as the line is half way between 1 litre and 2 litres.

6 Eva fills a measuring jug with juice.

The jug holds 2 l when full.



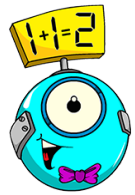
Do you agree with Eva? yes



D – There is a mistake.

A – The medicine in a teaspoon should be measured in millilitres not litres.

B – The capacity of a teaspoon is very small and so we would use millilitres instead of litres.



D – False

A – Litres are not a smaller measure of capacity than millilitres.

B – It is the other way round. Millilitres are a smaller measure of capacity than litres. Litres would be used for larger amounts of liquid, like petrol in a car or water in a bath tub. However millilitres are used for smaller amounts like juice in a glass or milk in a milkshake.

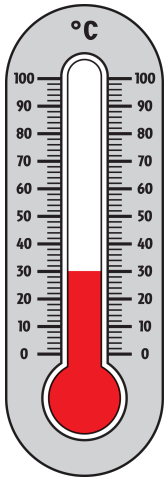
Lesson 2

All about temperature

This lesson is all about measuring temperature.

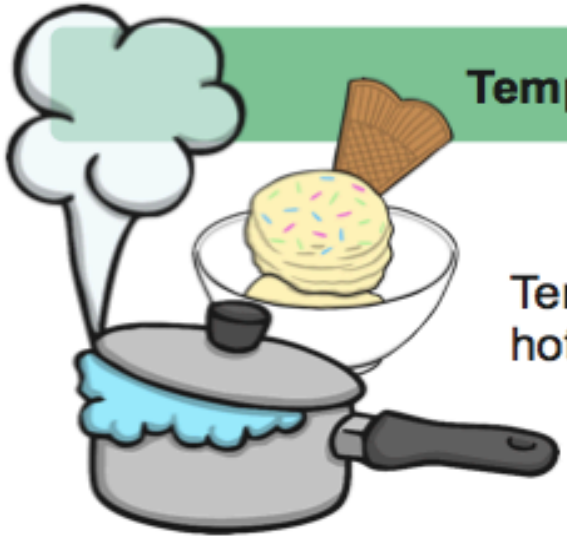
Look at the Learn Screens and complete the tasks on pages 31 and 33. Then go to:
White Rose Maths Home Learning Year 2

Click on **Year 2 Summer Term Week 11 lesson 2.** After you've watched the whole video, complete the tasks on pages 34 and 35. There's also a challenge you might want to try out that's also on page 35 !



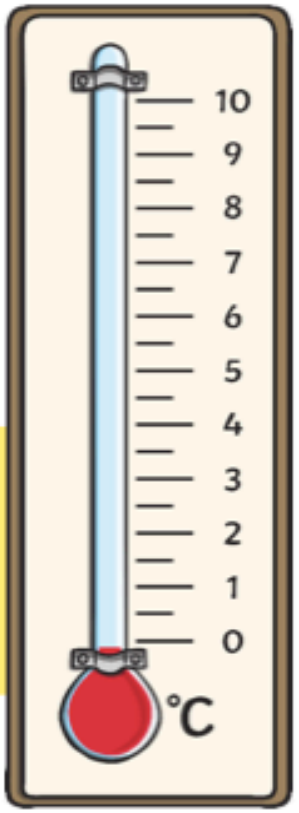
Learn Screen

Degrees Celsius



Temperature is a measure of heat.

Temperature tells us how hot or cold something is.



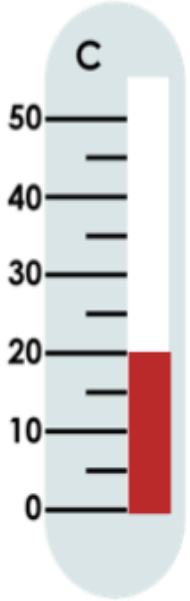
Thermometers are used to measure temperature.

We usually measure temperature in degrees Celsius (°C) but some parts of the world use degrees Fahrenheit (°F).

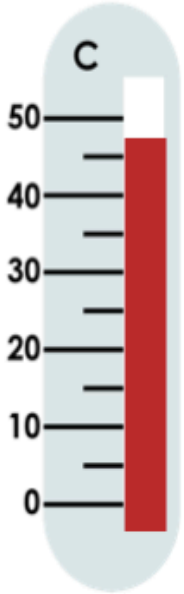
Learn Screen

How a thermometer works

When the temperature is cold, the liquid in the thermometer goes down.



When the temperature is hot, the liquid in the thermometer goes up.



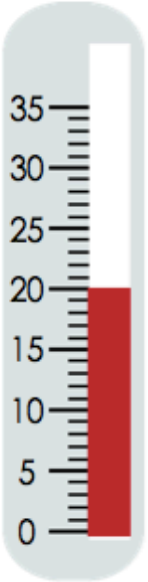
We use the words **colder**, **warmer** and **difference** when talking about temperature.

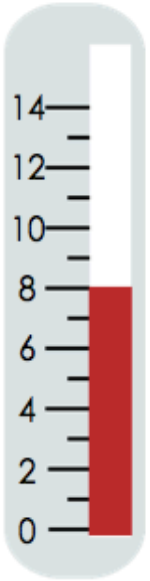
Learn Screen

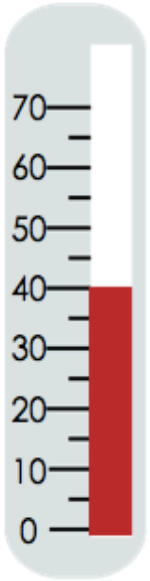
How a thermometer works

Let's develop our learning

Thermometers can be labelled in different ways so you have to look at the numbers and lines carefully.





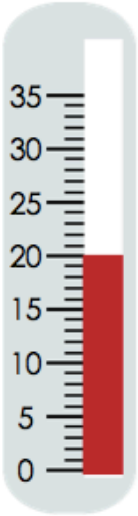


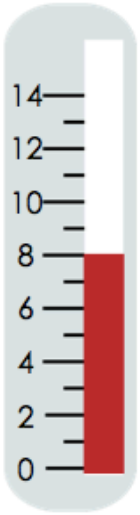
Can you read the temperatures from the scales?

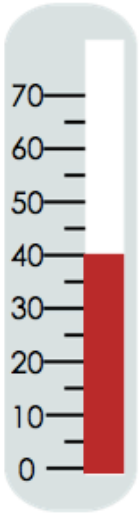
Which thermometer is in the warmest place?

Learn Screen

How a thermometer works







We measure temperature on degrees Celsius in the U.K. We write °C. So 8 degrees Celsius is write as 8 °C

Did you work out that the last thermometer is in the warmest place? Even though the mercury – that's the red liquid - looks like it is at the same level in each thermometer, if you look at the scale (the numbers) you can see that thermometer 1 says 20 °C, thermometer 2 says 8 °C and thermometer 3 says 40 °C. That means thermometer 3 is in the warmest place at it reads 40 °C

Have a Go!

FLUENCY 1

_____ are used to measure temperature.

FLUENCY 2

Match the temperatures to the thermometers.

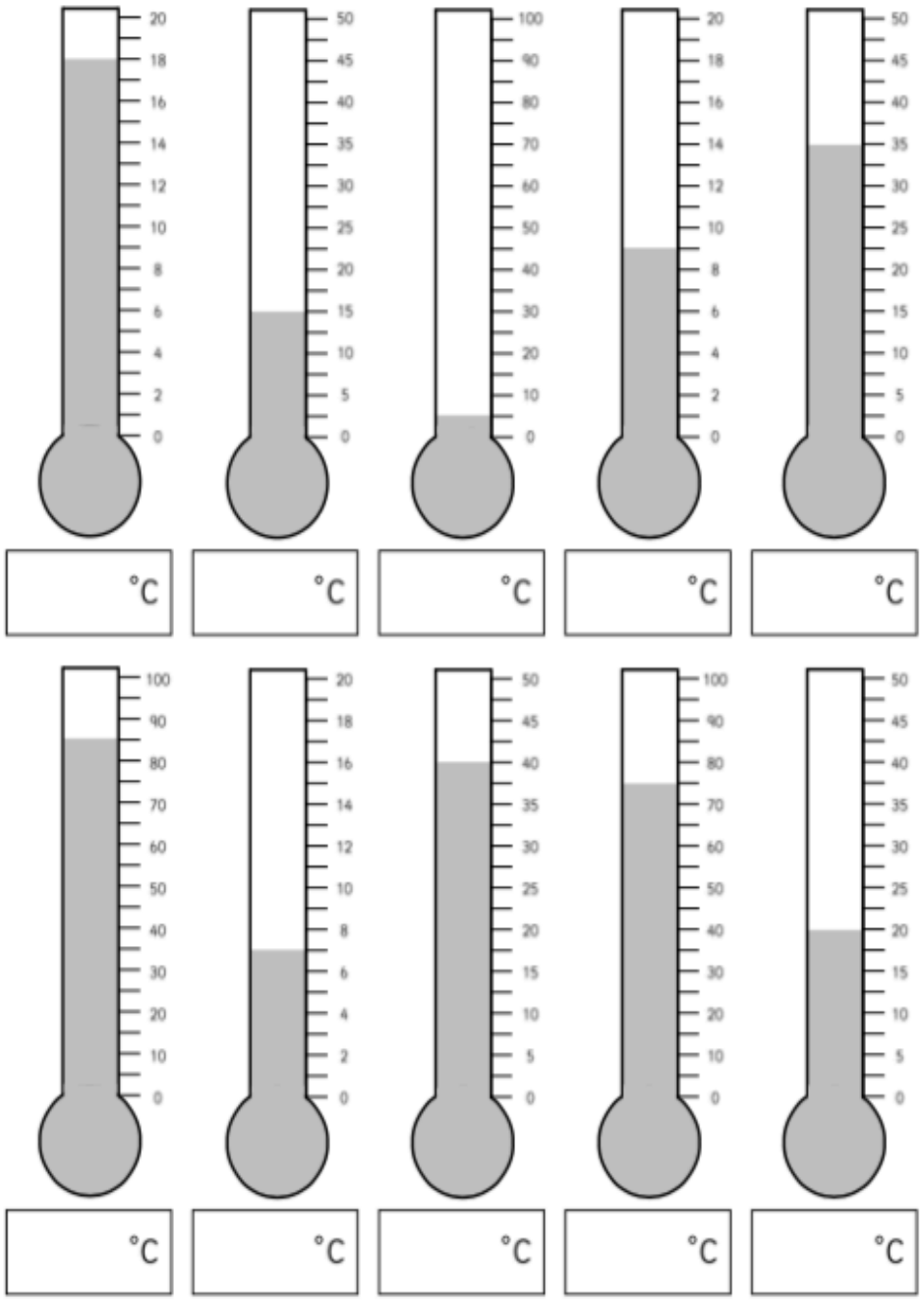
10°C | 40°C | 20°C

Which is the hottest?

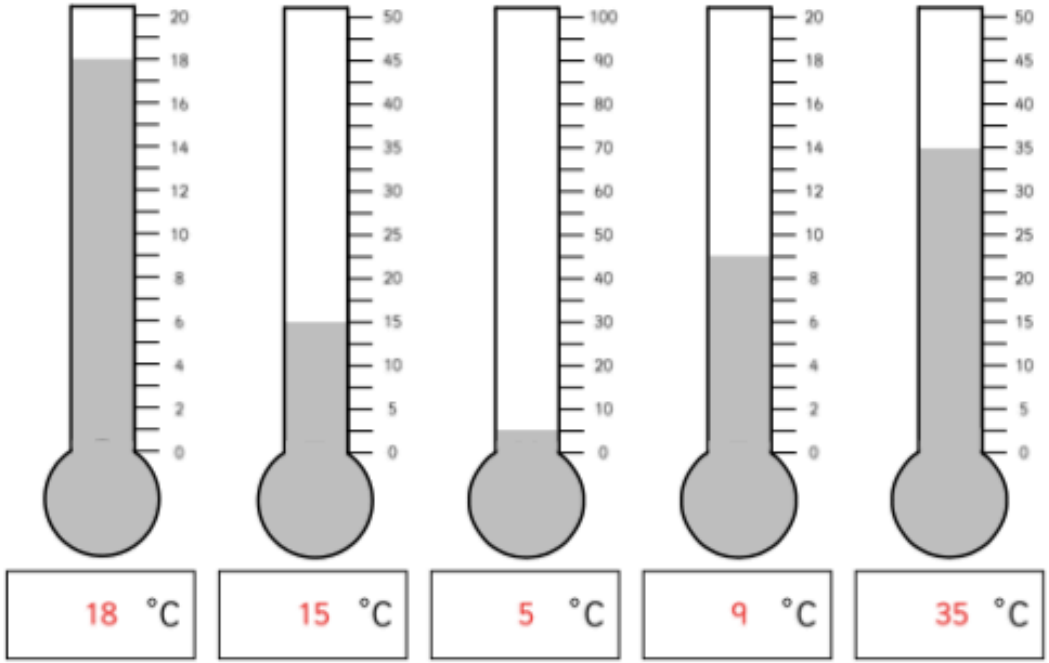
Which is the coldest?

YOUR TURN

1 Read and write the temperature.



1 Read and write the temperature.



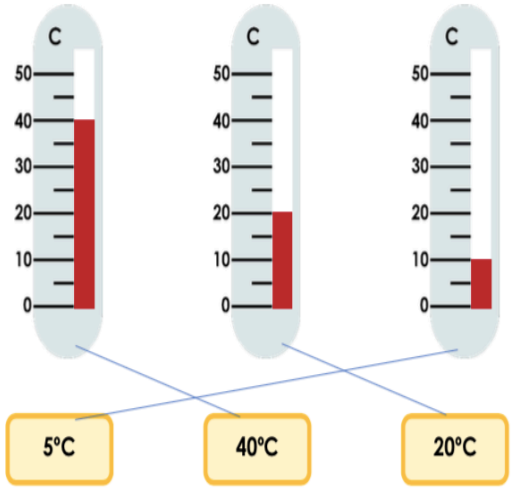
18 °C	15 °C	5 °C	9 °C	35 °C
85 °C	7 °C	40 °C	75 °C	20 °C

Answers

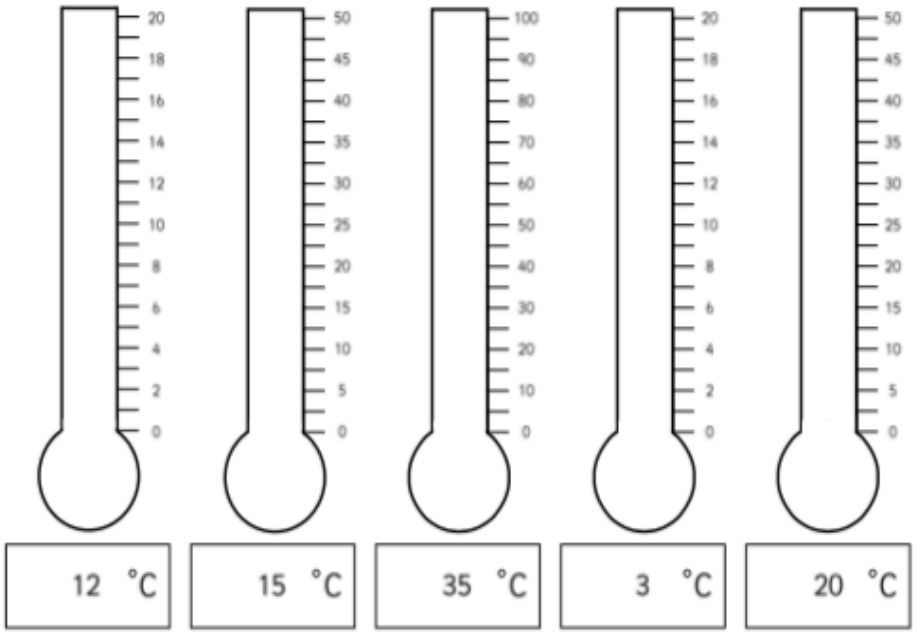
page 31

Thermometers are used to measure temperature.

Fluency 2



1 Colour the thermometer to match the temperature shown.



Now try these

Reading scales

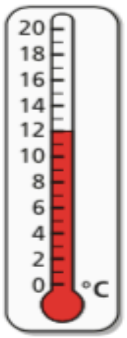
Your Task:
Show these temperatures on the thermometers. Colour them in or just draw a line at the correct point.

Your Task

Temperature

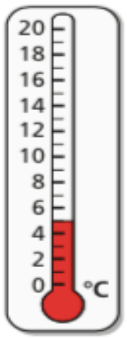
1 Write the temperature shown on each thermometer.

a)



□ °C

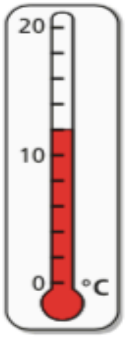
b)



□ °C

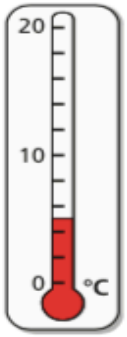
2 Write the temperature shown on each thermometer.

a)



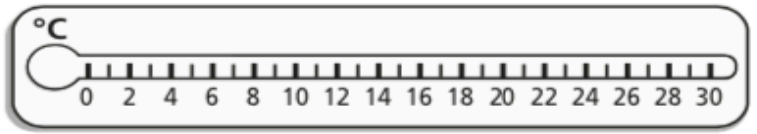
□ °C

b)



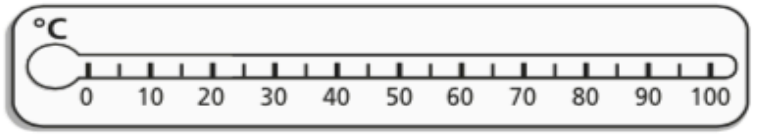
□ °C

3 Draw an arrow to each temperature on the thermometer.



10° 17° 29°

4 a) Draw an arrow to each temperature on the thermometer.



85°C 60°C 35°C

b) Where would you label 99°C on the thermometer?

Your Task

5 Put these temperatures in order from coldest to hottest.

26°C 43°C 19°C 7°C

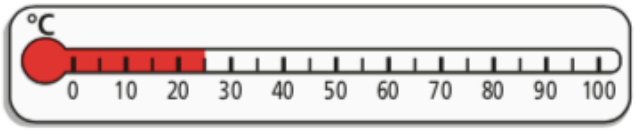
_____

6 Miss Trent is boiling some water.

She measures the temperature at different times.

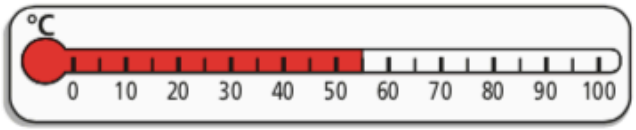
Write the temperature of the water each time.

a)



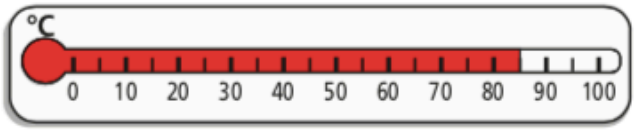
□ °C

b)

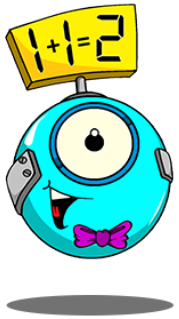


□ °C

c)



□ °C



Challenge

8 The table shows the temperature in some cities around the world on 1 June.

New York	Paris	Dubai	Sydney
18°C	2°C	43°C	27°C

a) Which city is the hottest?

_____

b) Which city is the coldest?

_____

c) How many degrees colder is it in New York than in Sydney?

□ °C

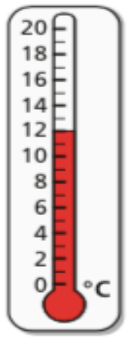
Answers

pages 34

Temperature

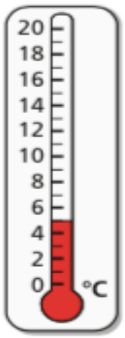
1 Write the temperature shown on each thermometer.

a)



12 °C

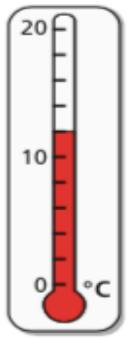
b)



5 °C

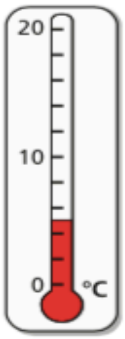
2 Write the temperature shown on each thermometer.

a)



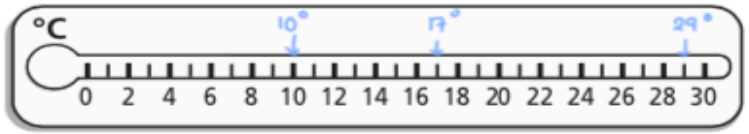
12 °C

b)



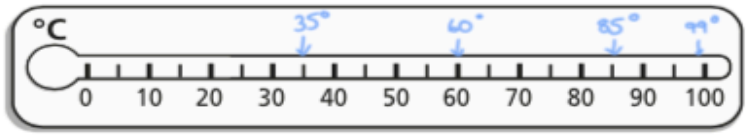
7 °C

3 Draw an arrow to each temperature on the thermometer.



10° 17° 29°

4 a) Draw an arrow to each temperature on the thermometer.



85°C 60°C 35°C

b) Where would you label 99°C on the thermometer?

Answers

pages 35

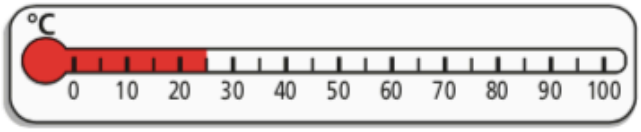
5 Put these temperatures in order from coldest to hottest.

26°C 43°C 19°C 7°C

7°C 19°C 26°C 43°C

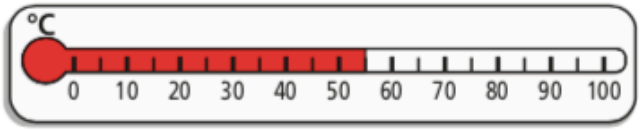
6 Miss Trent is boiling some water.
She measures the temperature at different times.
Write the temperature of the water each time.

a)



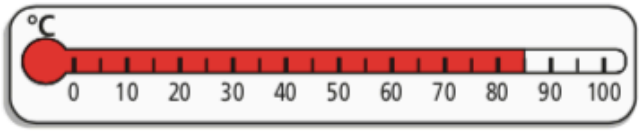
25 °C

b)



55 °C

c)



85 °C

Did you remember to find the difference by subtracting?

The table shows the temperature in some cities around the world on 1 June.

New York	Paris	Dubai	Sydney
18°C	2°C	43°C	27°C

a) Which city is the hottest?

Dubai

b) Which city is the coldest?

Paris

c) How many degrees colder is it in New York than in Sydney?

9 °C

Lesson 3

Telling the Time
o'clock and half past

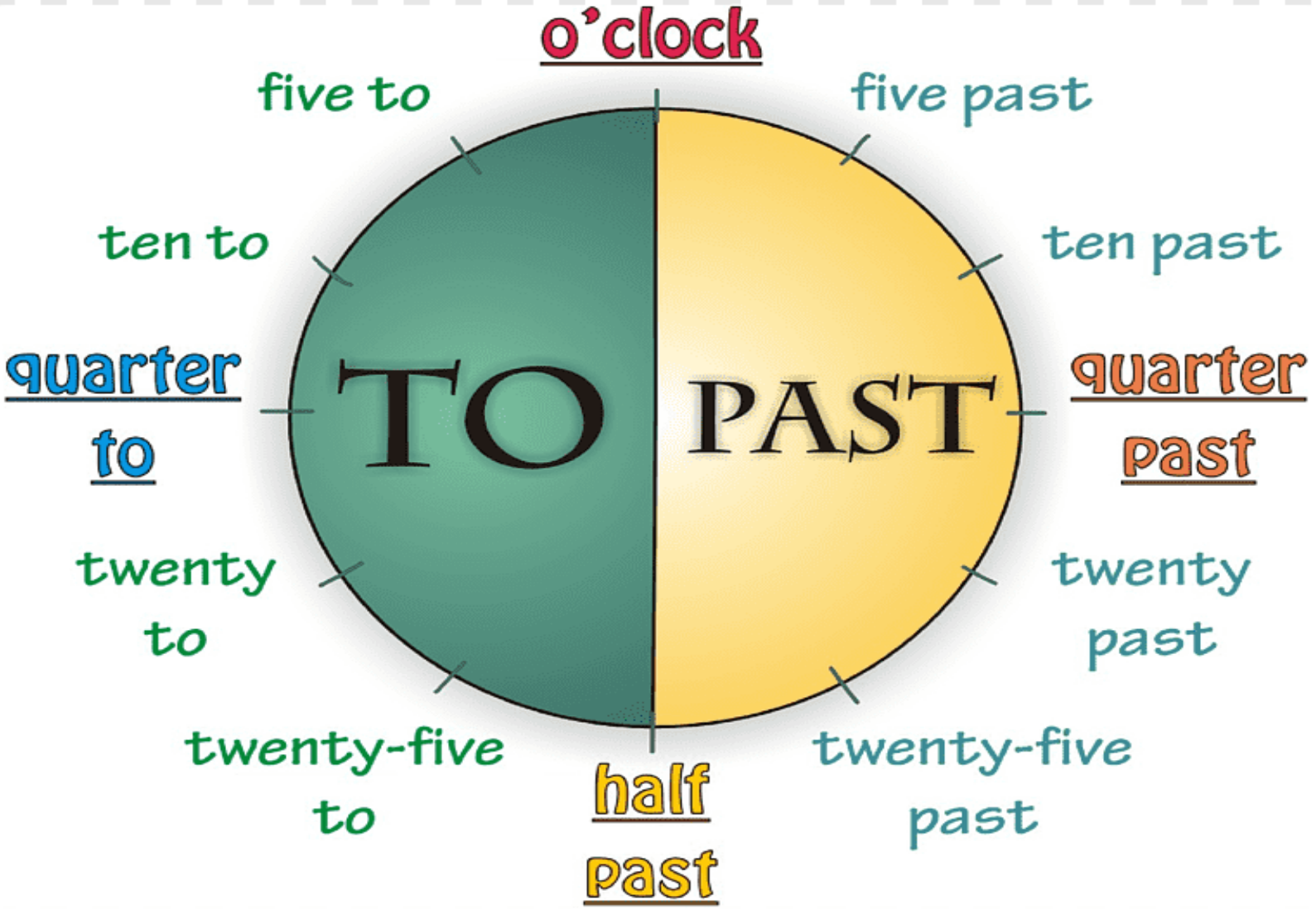
This lesson is all about revising telling the time to o'clock and half past. You were really good at this when we learned about it in school.

Use the Learn screens on pages 39 and 40 to help you. There's also a link to a revision video. Then go to:

White Rose Maths Home Learning Year 2

Click on **Year 2 Summer Term Week 11 lesson 3**. After you've watched the whole video, complete the tasks on pages 41 and 42.

Key Vocabulary

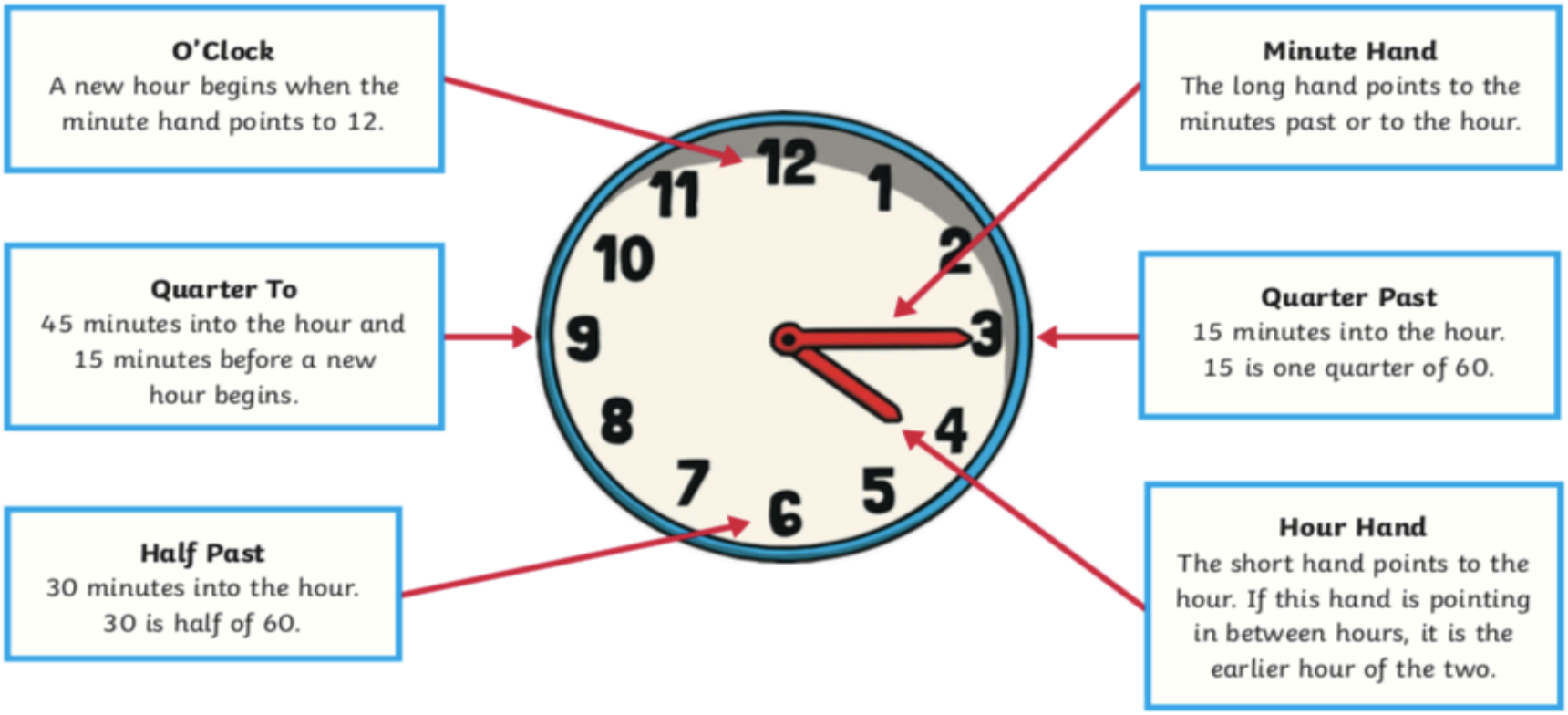


Learn Screen

Revise your learning.

Have a look at this video to review how to tell the time:
www.youtube.com/watch?v=IzRt9B04CMg

Telling the Time



Your Task

O'clock and half past

1 Match the clocks to the times.

7 o'clock

3 o'clock

12 o'clock

10 o'clock

Complete the sentence.

At o'clock, the minute hand points to ____

2 Match the clocks to the times.

half past 4

half past 1

half past 9

half past 6

Complete the sentence.

At half past, the minute hand points to ____

Your Task

3 Write the time shown on each clock.
Use the word bank to help you.

o'clock | half past

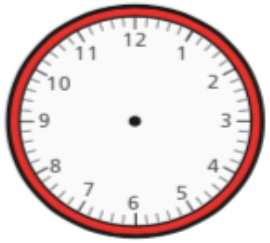
_____

_____

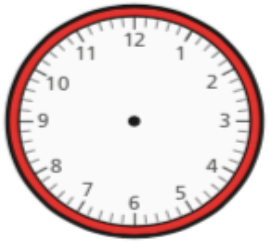
_____

_____

4 Draw hands to show the time on each clock.



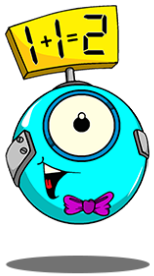
half past 11



half past 3

4 o'clock

1 o'clock



Challenge

Circle to show whether each sentence is true or false.

a) The clock shows 6 o'clock.

true **false**

b) The clock shows half past 10

true **false**

c) The clock shows half past 12

true **false**

Answers

page 41

O'clock and half past

1 Match the clocks to the times.

7 o'clock

3 o'clock

12 o'clock

10 o'clock

Complete the sentence.

At o'clock, the minute hand points to 12

2 Match the clocks to the times.

half past 4

half past 1

half past 9

half past 6

Complete the sentence.

At half past, the minute hand points to 6

Answers

page 42

3 Write the time shown on each clock.
Use the word bank to help you.

o'clock half past

2 o'clock

half past 8

half past 5

9 o'clock

4 Draw hands to show the time on each clock.

half past 11

half past 3

4 o'clock

1 o'clock

Circle to show whether each sentence is true or false.

a) The clock shows 6 o'clock.

true **false**

b) The clock shows half past 10

true **false**

c) The clock shows half past 12

true **false**

Compare answers with a partner.

Lesson 4

Telling the time-
quarter to and quarter past

This lesson is all about telling the time using quarter to and quarter past.

Look at the Learn Screens and watch the videos and do the quiz, then go to:

White Rose Maths Home Learning Year 2

Click on **Year 2 Summer Term Week 11 lesson 4.**

Watch the video and then complete the tasks on pages 49 and 50.

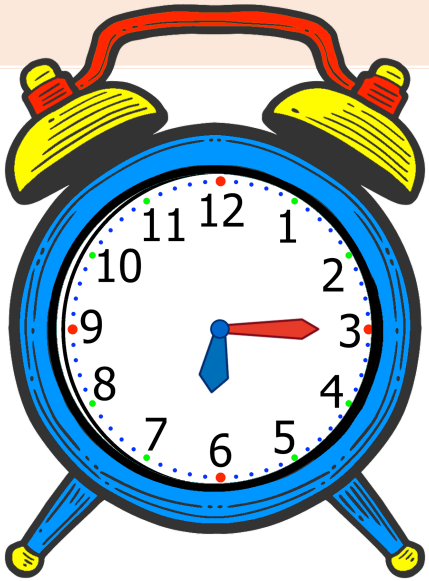
Learn Screen

Use this video to help understand how to tell the time:

www.bbc.co.uk/teach/supermovers/ks1-maths-telling-the-time/zk4t8xs

Then watch this video and complete the quiz at the bottom of the web page:

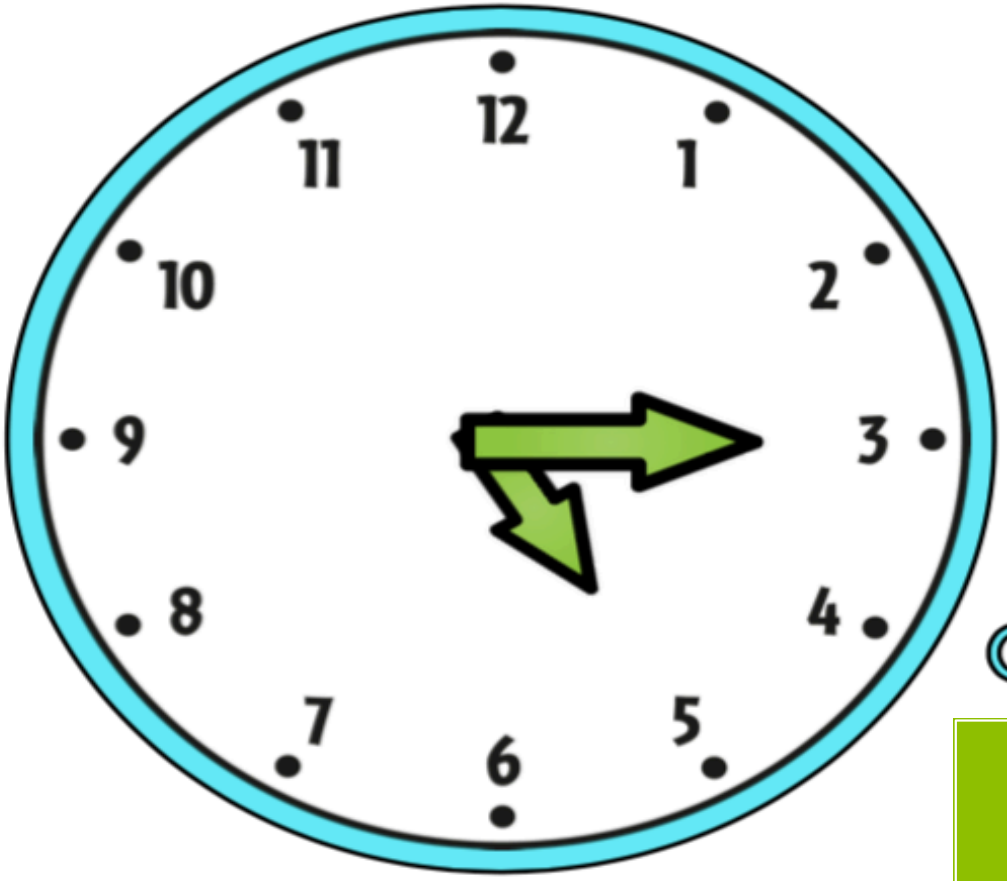
https://www.bbc.co.uk/bitesize/topics/zhk82hv/articles/zcmdwxs



Learn Screen

Quarter past

QUARTER PAST



When the big hand points straight on the 3, it is quarter past the hour. We then look at the hour hand to see which number it has just passed.

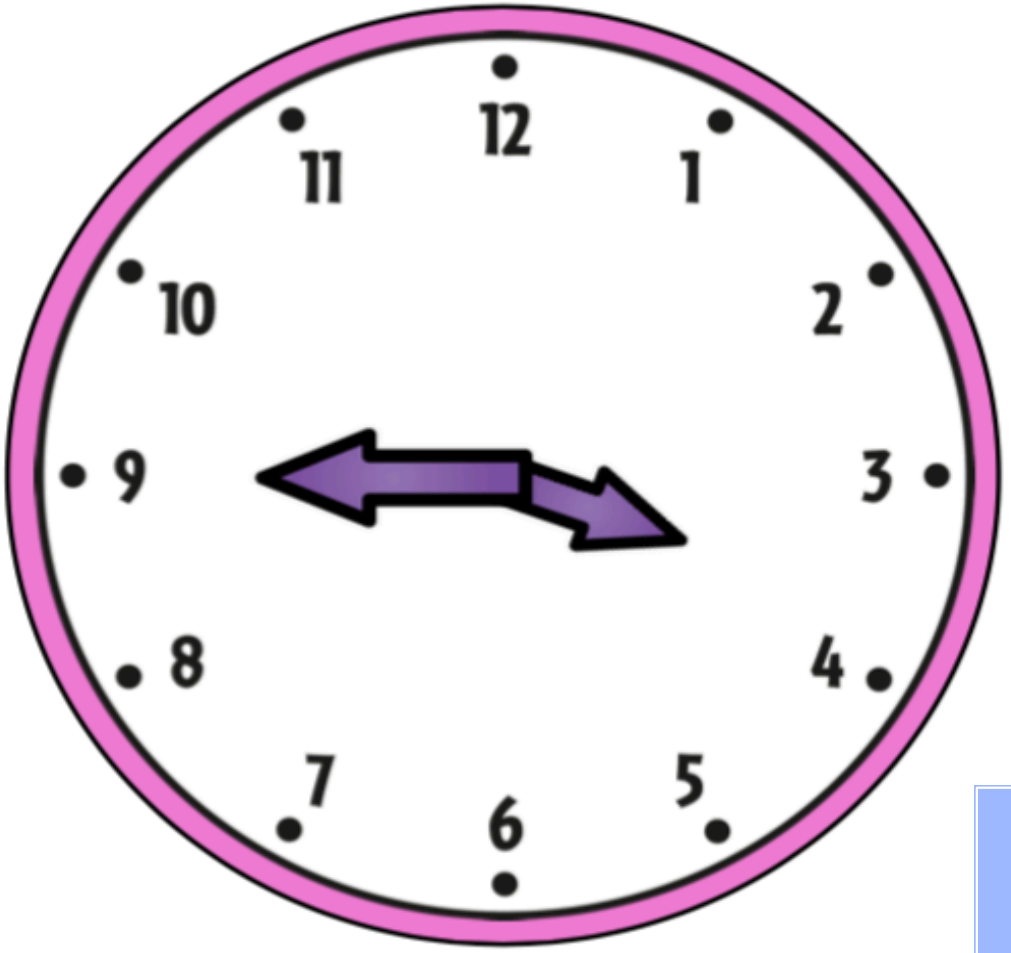
It is quarter past five

For quarter past, the minute hand is on the 3

Learn Screen

Quarter to

QUARTER TO



When the big hand points straight on the 9, it is quarter to the hour. We then look at the hour hand to see which number it has passed.

It is
QUARTER TO FOUR

For quarter to, the minute hand is on the 9

Your Task

Quarter past and quarter to

1 Match the clocks to the times.

quarter past 1

quarter past 12

quarter past 9

quarter past 5

Complete the sentence.

At quarter past, the minute hand points to ☐

2 Match the clocks to the times.

quarter to 10

quarter to 1

quarter to 7

quarter to 3

Complete the sentence.

At quarter to, the minute hand points to ☐

Your Task

3 Write the time shown on each clock.

Use the word bank to help you.

quarter to | quarter past

_____

_____

_____

_____

4 Draw hands to show the time on each clock.

quarter past 11

quarter past 3

quarter to 4

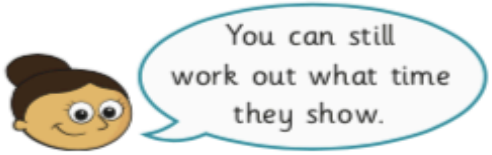
quarter to 1

5 The clocks have no numerals.

_____

_____

a)



Why does Dora think this?

b) Write what time each clock shows.

Answers

page 49

Quarter past and quarter to

1 Match the clocks to the times.




quarter past 1

quarter past 12

quarter past 9

quarter past 5

Complete the sentence.

At quarter past, the minute hand points to 3

2 Match the clocks to the times.




quarter to 10

quarter to 1

quarter to 7

quarter to 3

Complete the sentence.

At quarter to, the minute hand points to 9

Answers

page 50

3 Write the time shown on each clock.

Use the word bank to help you.

quarter to | quarter past

quarter past 5

quarter past 6

quarter to 8

quarter to 11

4 Draw hands to show the time on each clock.

quarter past 11

quarter past 3

quarter to 4

quarter to 1

5 The clocks have no numerals.

quarter to 12

quarter past 12

a)

You can still work out what time they show.

Why does Dora think this?

b) Write what time each clock shows.

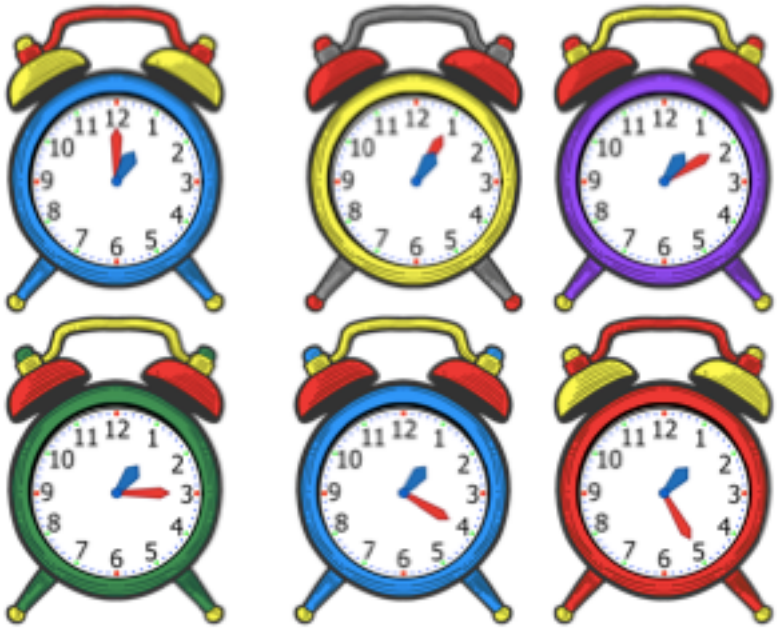
Lesson 5

Try out your skills.

Today's activities are a chance for you to try out your new skills.

The activities are all linked to our learning from this week and last.

Have fun!

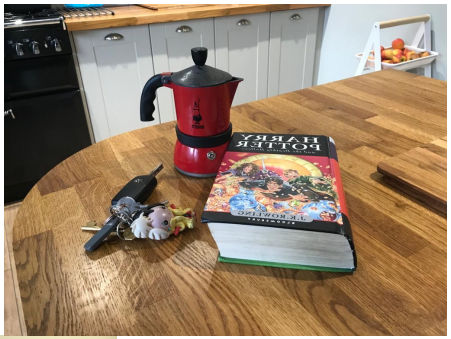


Your Task

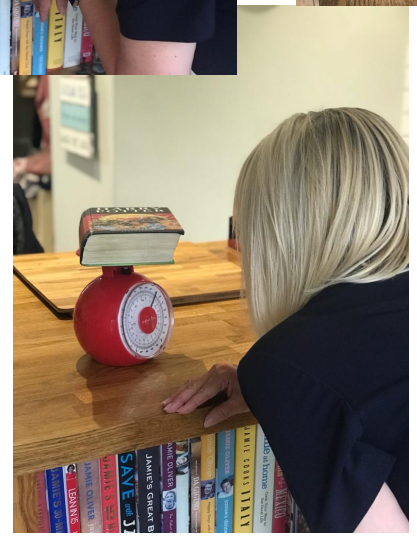
Find 5 items in your house and measure the mass using kitchen or bathroom scales. Record your answers in grams and kilograms.

You must ask your grown up for permission to do this.

Coffee Pot – 450 g



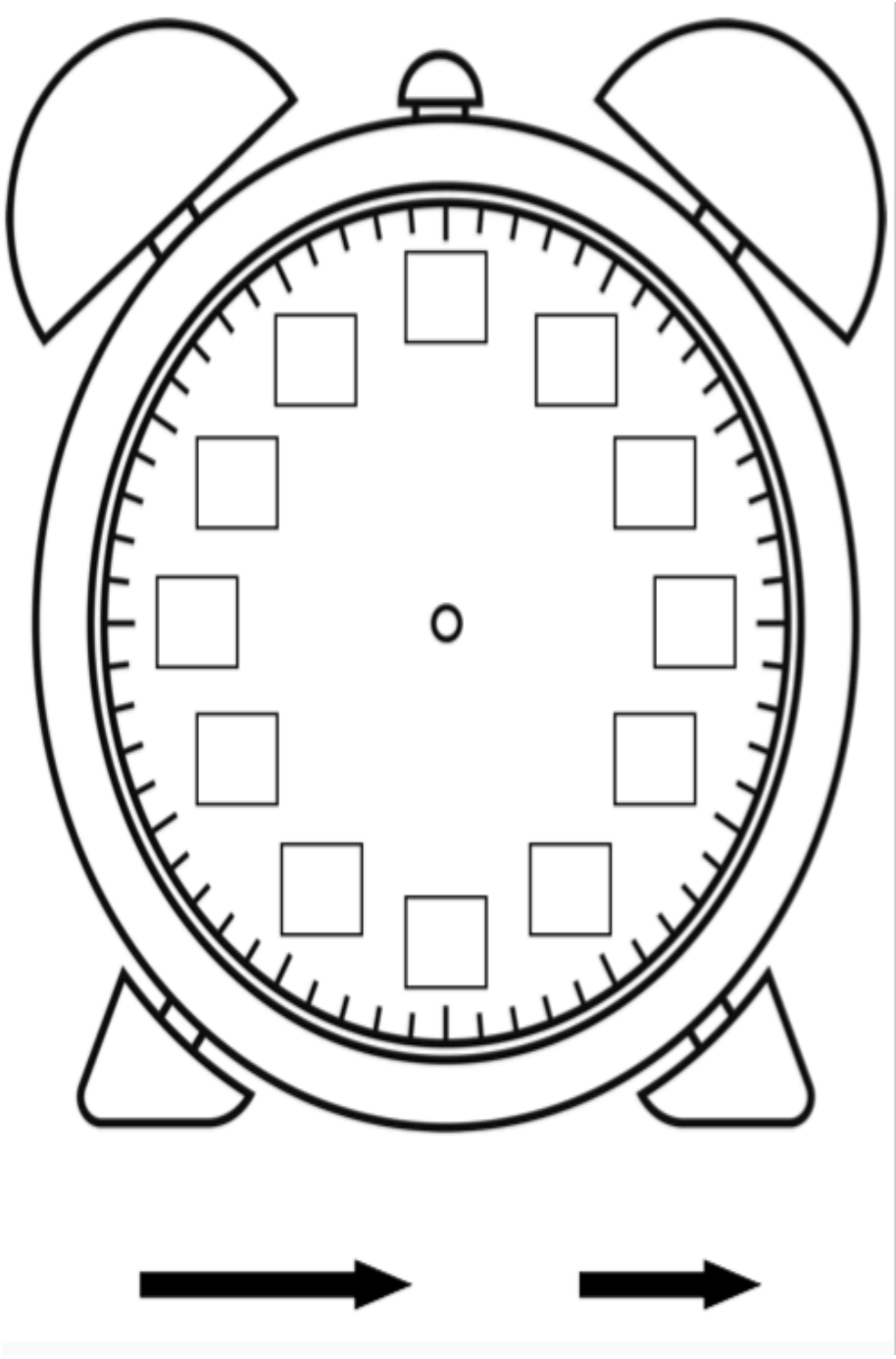
Keys -200 g



Book -800 g

I weighed 3 items – a book, my keys an a coffee pot – and they all weighed less than 1kg.

I'd love to see what you find, so please send lots of photos to me at info@st-jo-st.dudley.sch.uk



Make your time count?

Create your own clock writing the numbers and positioning the hands in the correct place. Use your clock to make different times. Test out your clock on your family and friends.

Think about it!

Asha is helping her mum do the shopping for a huge family party.

Some of the amounts on the list have been rubbed off!

I remember my mum said there was a total of **15 litres** of drink for the party!

Party shopping list!

30 balloons

orange juice

apple juice

lemonade

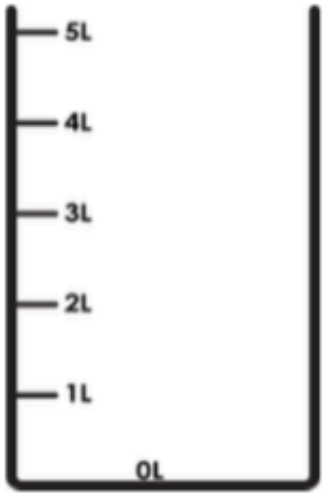
30 plastic cups

What amounts of each drink could there be?

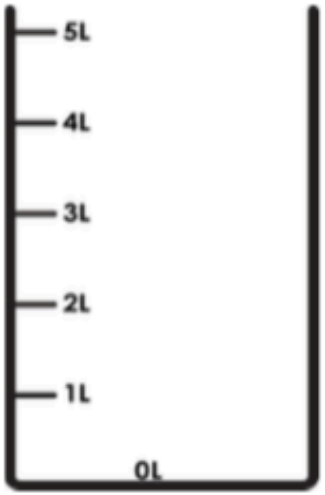
Find 5 possibilities

You can do this!

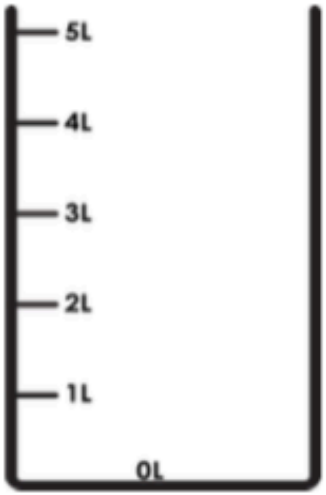
Fill each jug to the amount described.



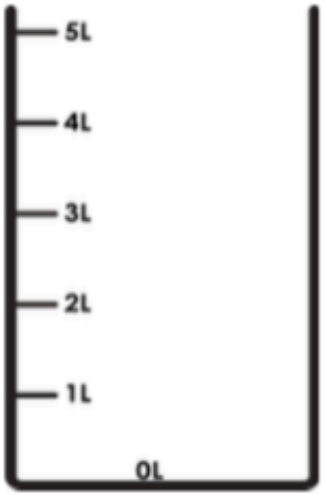
Jerry says...



Alfie says...

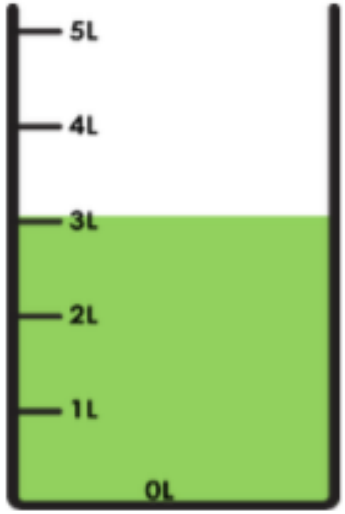


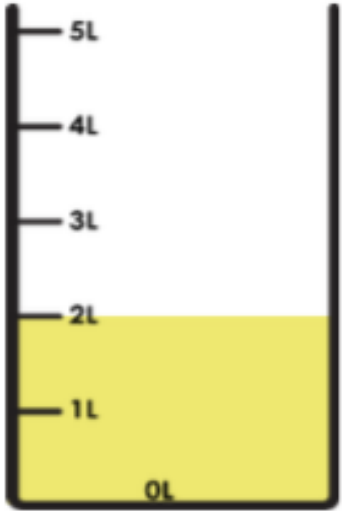
Jane says...

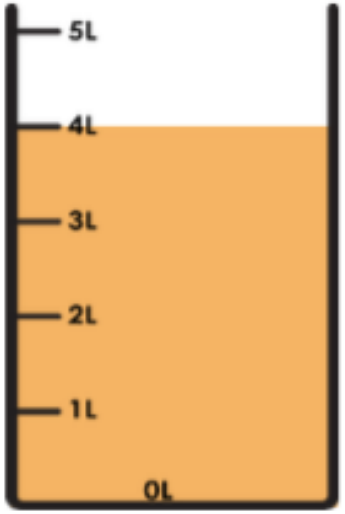


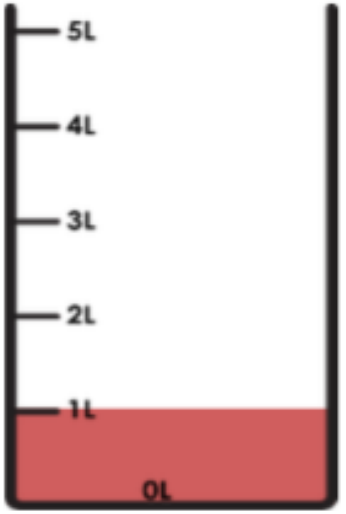
Ranjit says...

Answers









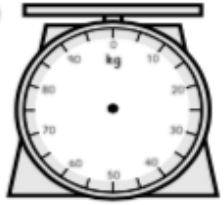
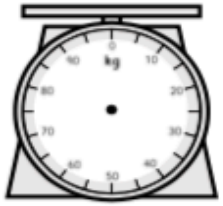
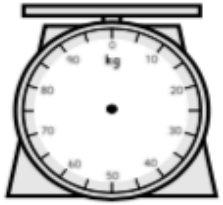
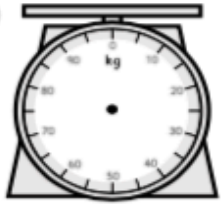
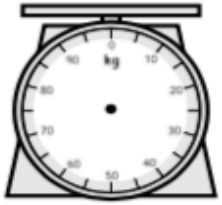
There are many possibilities but all three amounts should equal 15 litres when added.

E.g. 10 litres orange juice, 2 litres apple juice, 3 litres lemonade.

5 litres orange juice, 5 litres apple juice, 5 litres lemonade.

Revision Time!

1 Draw the pointer on each of the scales using the mass shown.

a  Mass = 9 kg	b  Mass = 14 kg	c  Mass = 23 kg
d  Mass = 36 kg	e  Mass = 46 kg	f  Mass = 54 kg
g  Mass = 65 kg	h  Mass = 5 kg	i  Mass = 85 kg
j  Mass = 70 kg	k  Mass = 55 kg	l  Mass = 25 kg

Can you draw the pointer on each scale?

Revision Time Answers!

1 Draw the pointer on each of the scales using the mass shown.

a  Mass = 9 kg	b  Mass = 14 kg	c  Mass = 23 kg
d  Mass = 36 kg	e  Mass = 46 kg	f  Mass = 54 kg
g  Mass = 65 kg	h  Mass = 5 kg	i  Mass = 85 kg
j  Mass = 70 kg	k  Mass = 55 kg	l  Mass = 25 kg

Good work Year 2. You are maths superstars and you should be very proud of your achievements.

You know how much Mrs. Hounsell and I love to see your work, so please send lots of photos to info@st-jo-st.dudley.sch.uk