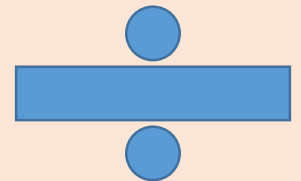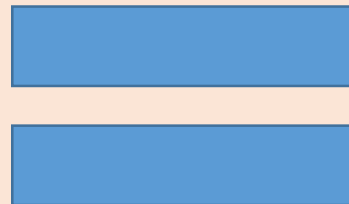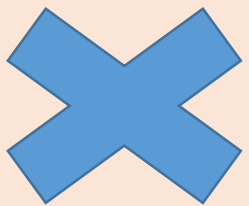# Year 2
Maths
W.B 22.06.20

Task 1 – comparing volume.
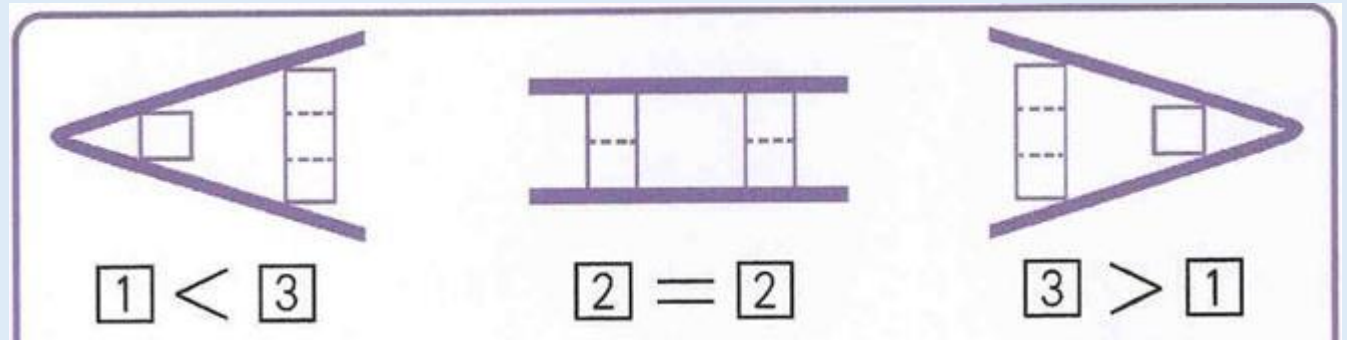
Steps to Success
1. compare the volume of containers using < , > and =

2. **Capacity** is how much the container **can** hold.

3. **Volume** is how much the container **is currently** holding.

Let's start of by reminding ourselves of how to use the symbols < , > and =.

< means 'is less than' because the number to the left is less than the number to the right. For example 1<3 means '1 is less than 3'

= means equal or the same because both sides are the same. For example 2 = 2 means 2 is the same as/equal to 2.

> means 'is more than' because the number to the left is more than the number to the right. For example 3>1 means 3 is more than 1.

Compare the volumes below using the symbols <, > or = between the two containers.
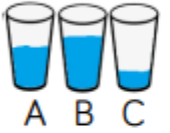
Task 1

Complete the sentences using the words 'less', 'more' or equal'.

Container A has _____ than container B.

Container C has _____ than container B.

Container A has _____ than container C
but _____ than container B.

A   B

A   B   C

Complete the sentences:

The bottle can fill _____ mugs.
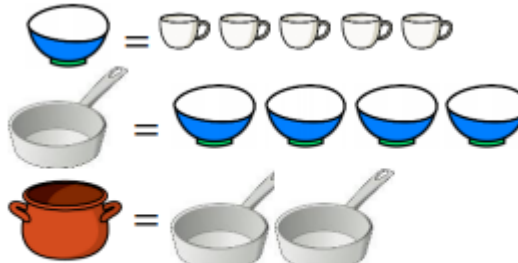
The pot can fill _____ mugs.

Use other containers to investigate how many mugs of rice they take to fill.

Challenges

Whitney had two full bottles of juice.
She poured some juice into two glasses.

A   B

Which glass has the most juice in?
Which has the least juice in?
Explain how you know.

How many cups does the pot hold?

Choose a selection of different sized containers.
Decide how you will measure how much liquid each container can hold.
Order your containers from smallest to largest.
Compare the containers using <, > or =

Task 2 – Measuring volume in millilitres

Steps to Success

1. Place the measuring jug on a flat surface.

2. Pour in the liquid.

3. Read the scale, where the top of the liquid is.

4. Record the number with the word 'millilitres' after it or this can be written as 'ml' in short.

Today we are going to look at millilitres.

Millilitres are used to measure the amount of a liquid you have. You might use millilitres to see how much water you have, or how much milk you need to put into your cake mix. Some of you might have used them at home before. In order to read millilitres, you need to see which number, the top of the liquid sits at. You have to make sure the conainer is flat before reading! Have a look at the example below.
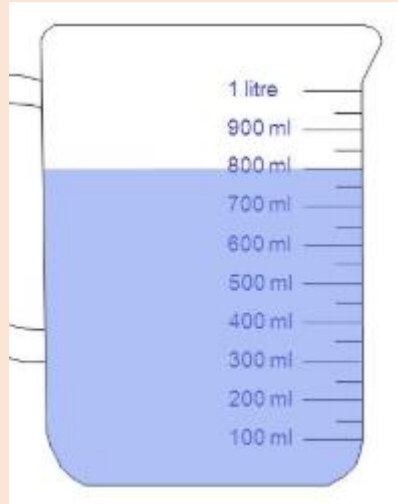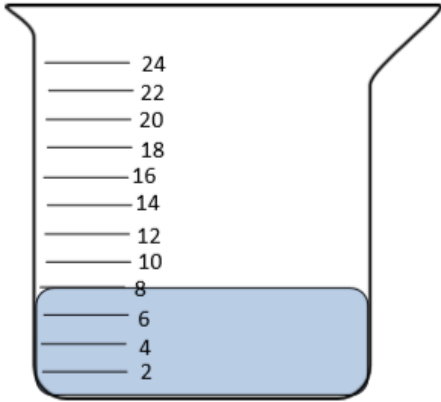

I can see that I have 800 millilitres (800ml) of water in this jug, because the top of the water is at 800ml on the jug.

When you have different shape containers, the same amount of liquid might look very different. Here are some pictures of the same amount of liquid, in different containers. Why do you think they look different?
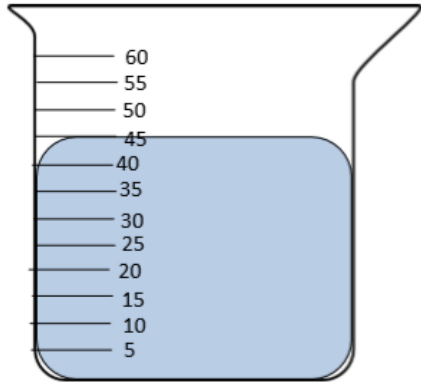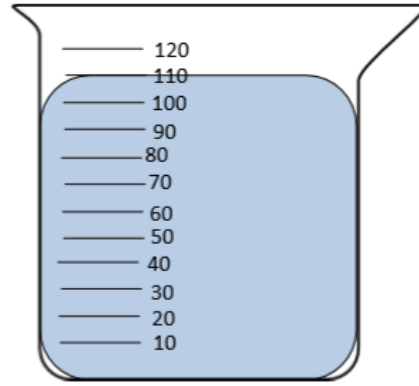
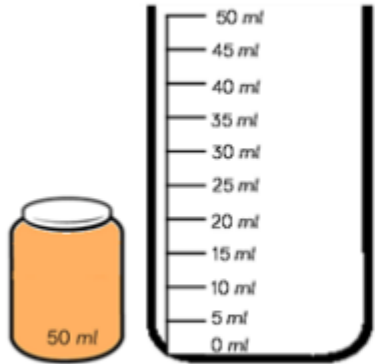# Task 1)

Write down the volumes that you can see below.

Beaker 1 scale: 24, 22, 20, 18, 16, 14, 12, 10, 8, 6, 4, 2

_____ ml

Beaker 2 scale: 60, 55, 50, 45, 40, 35, 30, 25, 20, 15, 10, 5

_____ ml

Beaker 3 scale: 120, 110, 100, 90, 80, 70, 60, 50, 40, 30, 20, 10

_____ ml

Draw the level on the scale to show the capacity of each container.

Scale 1: 50 ml, 45 ml, 40 ml, 35 ml, 30 ml, 25 ml, 20 ml, 15 ml, 10 ml, 5 ml, 0 ml

50 ml

The container's capacity is _____ ml

Scale 2: 50 ml, 45 ml, 40 ml, 35 ml, 30 ml, 25 ml, 20 ml, 15 ml, 10 ml, 5 ml, 0 ml

25 ml

The container's capacity is _____ ml

Scale 3: 100 ml, 90 ml, 80 ml, 70 ml, 60 ml, 50 ml, 40 ml, 30 ml, 20 ml, 10 ml, 0 ml

100 ml
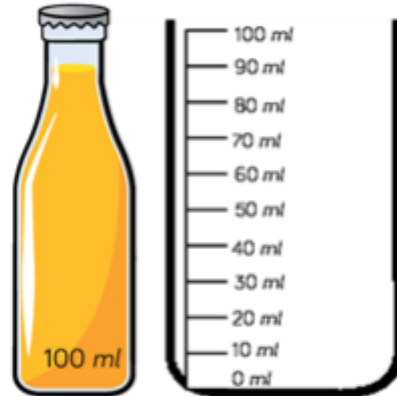
The container's capacity is _____ ml

Challenges

A [spoon] holds 5 ml of liquid.

How many [spoon] of liquid are there in each container?

A
ml
100, 90, 80, 70, 60, 50, 40, 30, 20, 10

B
ml
100, 90, 80, 70, 60, 50, 40, 30, 20, 10
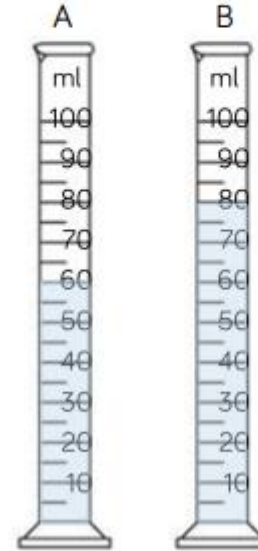
Estimate the amount of water in the container.

100 ml, 90 ml, 80 ml, 70 ml, 60 ml, 50 ml, 40 ml, 30 ml, 20 ml, 10 ml, 0 ml
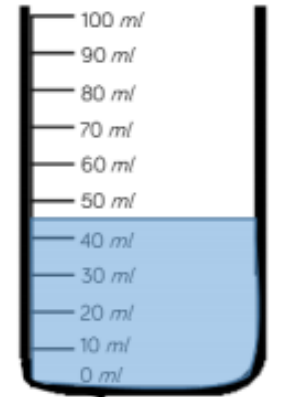
Explain why you have given your answer.

Task 3 – Measuring volume in litres

Steps to Success
1. Read the number that the liquid comes up to.

2. Record the number with the word 'litres' after it or this can be written as 'l' in short.

3. Recognise when it is more appropriate to measure in litres.

Litres are used to weigh larger amounts of liquids. We can use litres to measure things such as large bottles of coke. 1 litre is the same as 1000 millimetre
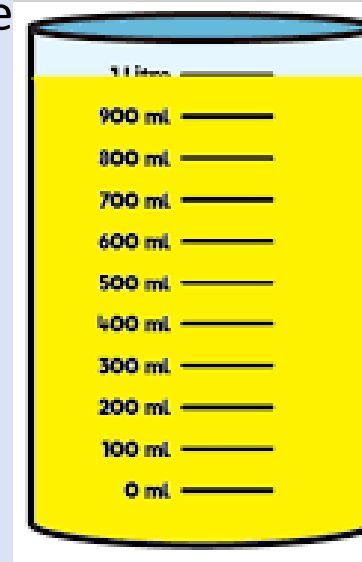
I can see that I have 1 litre of orange juice here because the container is on a flat surface and the liquid comes up to 1 litre on the scale. I can also see here that 1 litre is the same as 1000 millilitres.

Task 1)

Show how much liquid is in each cylinder after you:

- Pour 3 litres of water into the cylinder.
- Leave 1 litre of cola in the bottle.
- Pour half of the juice into the cylinder.

Challenges

Mo puts 4 litres of water in bucket A. He then pours 3 litres from bucket A into bucket B.

Which sentence is correct?   A   B

- There is more in bucket A.
- There is less in bucket A.
- There are equal amounts in each bucket.

Explain why.

3 bowls each have more than 20 l of water in but less than 50 l

The green bowl has 5 l more than the red bowl.

The blue bowl has 10 l more than the green bowl.

How much could each bowl have in?

Eva wants to measure 2 litres of water into a tub. She only has a 5 litre and a 3 litre container.

5 l   3 l
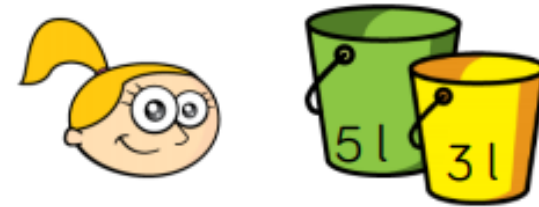
How can she use both containers to measure 2 litres?

Task 4- Temperature Celsius

Steps to Success
1. Read the number that the liquid comes up to.

2. Record the number with the word 'Degrees Celsius' after it, or this can be written as °C for short.

°C are used to tell us how hot or cold something is. We can use degrees Celsius to tell us, how hot the bath is, how warm the weather is, how cold a fridge is etc. Can you think of any other reasons you might need to use degrees Celsius? To measure temperature we would use a thermometer like the one below. Some thermometers might be different to this though.
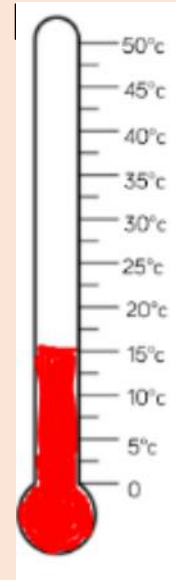
I can see that the temperature being measured here is 15 °C because the liquid has risen to 15 °C on the thermometer.

Task 1)

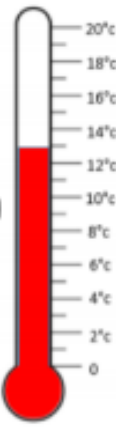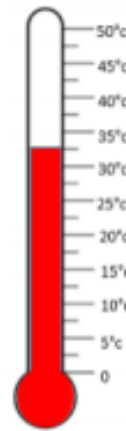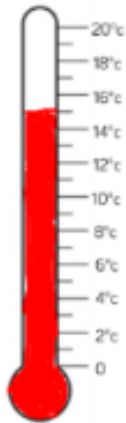# Complete the thermometers to show the temperatures.
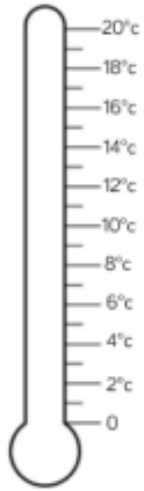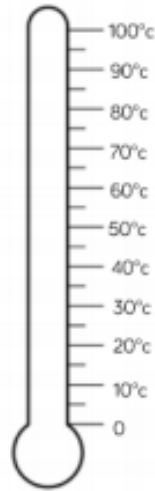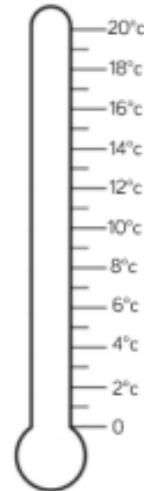
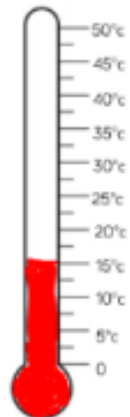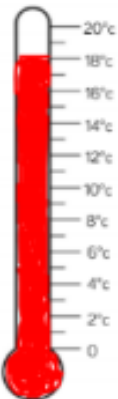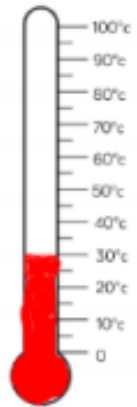16 ºC   35 ºC   70 ºC   9 ºC

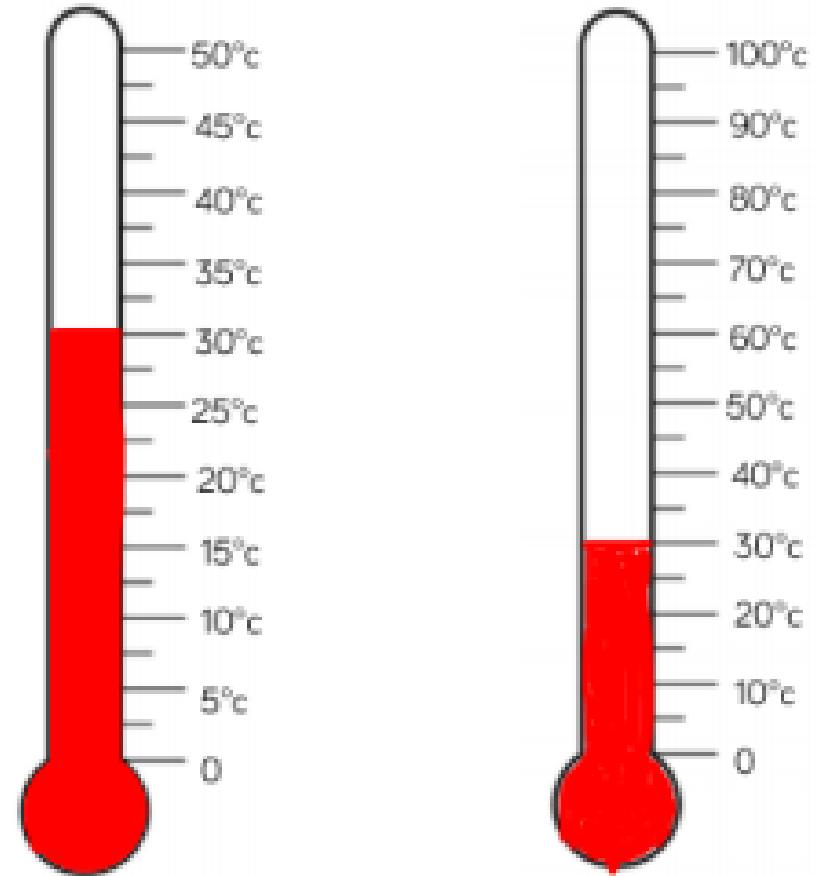# Compare the temperatures using <, > or =

Challenges

Mollie took the temperature at 12 p.m. and again at 5 p.m.

There was a difference of 7°C

What could the temperatures be?

What is the same and what is different about the thermometers/temperatures?

Day 5 – arithmetic questions.

The following questions are based on number knowledge. We have covered multiplication, division, fractions, addition and subtraction over the past few weeks. If your child struggles with this, you may wish to return to work set over the previous weeks to support them or refresh their memories.

Day 5 – arithmetic questions.

1 21 + 4 =

1 mark

2 6 + 3 + 3 =

1 mark

3 60 + 20 =

1 mark

4 13 − 7 =

1 mark

5 2 + 9 =

1 mark

6 4 × 2 =

1 mark

7 86 − 30 =

1 mark

8 $\frac{1}{2}$ of 6=

1 mark

9 70 ÷ 10 =

1 mark

10 65 + 29 =

1 mark

11 26 − 15 =

1 mark

12 8 + 7 + 5 =

1 mark

13 7 × 4 =

1 mark

14 60 ÷ 5 =

1 mark

15 $\frac{1}{3}$ of 18=

1 mark