

Water Cycle Maths 2

Welsh Water collects water in our many reservoirs. You played the Water Cycle game when you visited our Discovery Centre and collected water in your reservoir. Can you remember how much your team collected?

Activity 1

These teams collected the following in their Water Cycle game.
Can you convert from metric to imperial using the information below?

1 litre = 1000ml ($\div 1000$) 1 litre = 1.76 pints ($\times 1.76$) 1 gallon = 8 pints ($\div 8$)

Water collected in millilitres (ml)	Water collected in litres (l)	Water collected in pints	Water collected in gallons
1000			
1200			
1300			
1850			
1450			
1275			
1675			
1925			
2025			
1525			
Challenge – Now try these!			
	2.4		
		16	
			15

Around 320 litres of water goes into sewers from the roof when it rains.
How many pints is this?

We clean 831 million litres of water per day.
Convert this into gallons

You each use 150 litres of water per day.
How many pints is this?

A mature tree can soak up 240 litres a day!
How many millilitres is this?

I can convert from metric to imperial measures.

Activity 2

When a candle burns the wax changes from a solid into a liquid. However, some of this liquid wax burns and turns into a gas. James lit a candle and let it burn. He weighed it every minute.

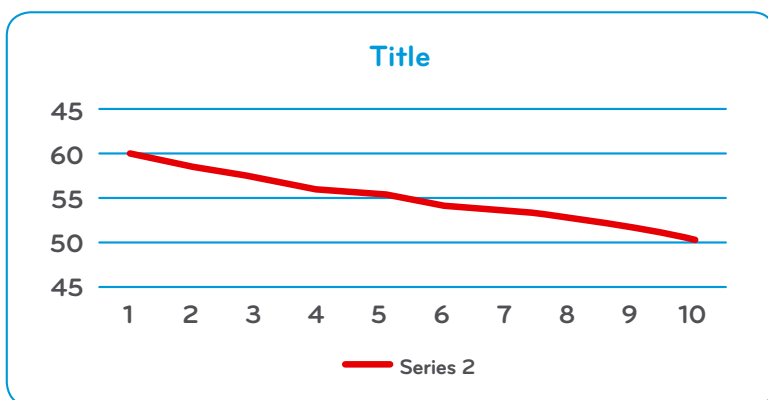
Here are his results.

Time (minutes)	Weight (g)
1	60.0
2	58.5
3	57.2
4	56.0
5	55.4
6	54.0
7	53.46
8	52.8
9	51.7
10	50.0

Draw a line graph to show his results.

TIPS: -

- What will the title of your graph be?
- The time will go along the bottom.
- What scales will you use?
- Remember to plot the points and join them up at the end.



I can draw a line graph.

Now use your graph to write a science conclusion. The longer the time the _____ because...

Activity 3

These children drank water upwards like a tree.

Name	Height (cm)	Water drank (ml)
Sian	148	10
Dafydd	142	12
Shaun	159	27
Seren	135	30
Cariad	145	22
Aneurin	138	4
Delyth	142	8
Llewellyn	165	4
Bronwyn	152	10
Bryn	154	24

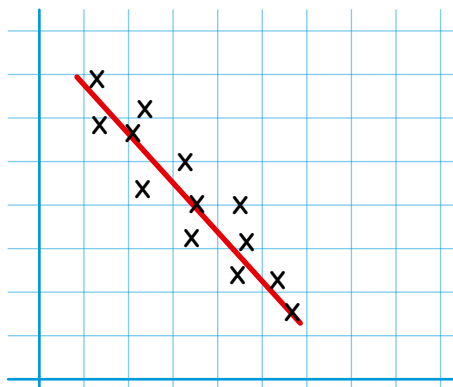
Draw a scatter graph to answer this question: -

Title: Can shorter children drink more water against gravity (upwards) than taller children?

TIPS: -

- The ml drank will go along the bottom. (x axis)
- The height will go upwards. (y axis)
- What scales will you use?
- Add two labels to your graph. (x and y axis)

Is there any pattern in your results?



I can use data in a table to draw a scatter graph.