DIY Capacity Project

Your task is to change a plain plastic bottle into a measuring bottle. This is called calibrating.

You need:

1. strip of sticky paper / masking tape
2. lentils / rice / water
3. a 2 litre bottle
4. a 100ml measuring cup
5. a 50ml measuring cup

- Stick a strip of sticky paper vertically on the side of your 2 litre bottle.
- Fill the 100ml measure with lentils/rice...
- Pour them into the 2 litre bottle.
- Make sure the lentils are level.
- Mark 100ml on the strip of paper/masking tape, at the top of the pile of lentils.
- Complete your scale by marking 100ml intervals until your bottle is full of lentils.

> To make it easier to pour the lentils use a funnel!

You now have a scale that will measure to the nearest 100ml.

Can you use a 50 ml measuring cup to improve on this?

- Use your bottle to find the capacities of some other containers you can find around the house!

> Remember that you might need to estimate between two intervals!

Let's have fun with water!

Look at the different objects below.

Each has a different capacity.

250ml	5ml	500ml

Using the objects above, how many different ways can you think of, to fill a jug with exactly 1ℓ of water?

4 cups = 250ml + 250ml +250ml+250ml = 1,000ml or 1ℓ

2 bottles = 500ml+500ml = 1,000ml or 1ℓ

1 bottle and 2 cups = 500ml+250ml+250ml = 1,000ml or 1ℓ

1 bottle and 100 times a teaspoon = 500ml+(5mlx100) = 1,000ml or 1ℓ

1 bottle, 1 cup and 50 times a teaspoon = 500ml+250ml+(5mlx50)= 1,000ml or 1ℓ

1 cup + 150 times a teaspoon = 250ml + 750ml = 1,000ml or 1ℓ

200times a teaspoon = 5mlx200 = 1,000ml or 1ℓ
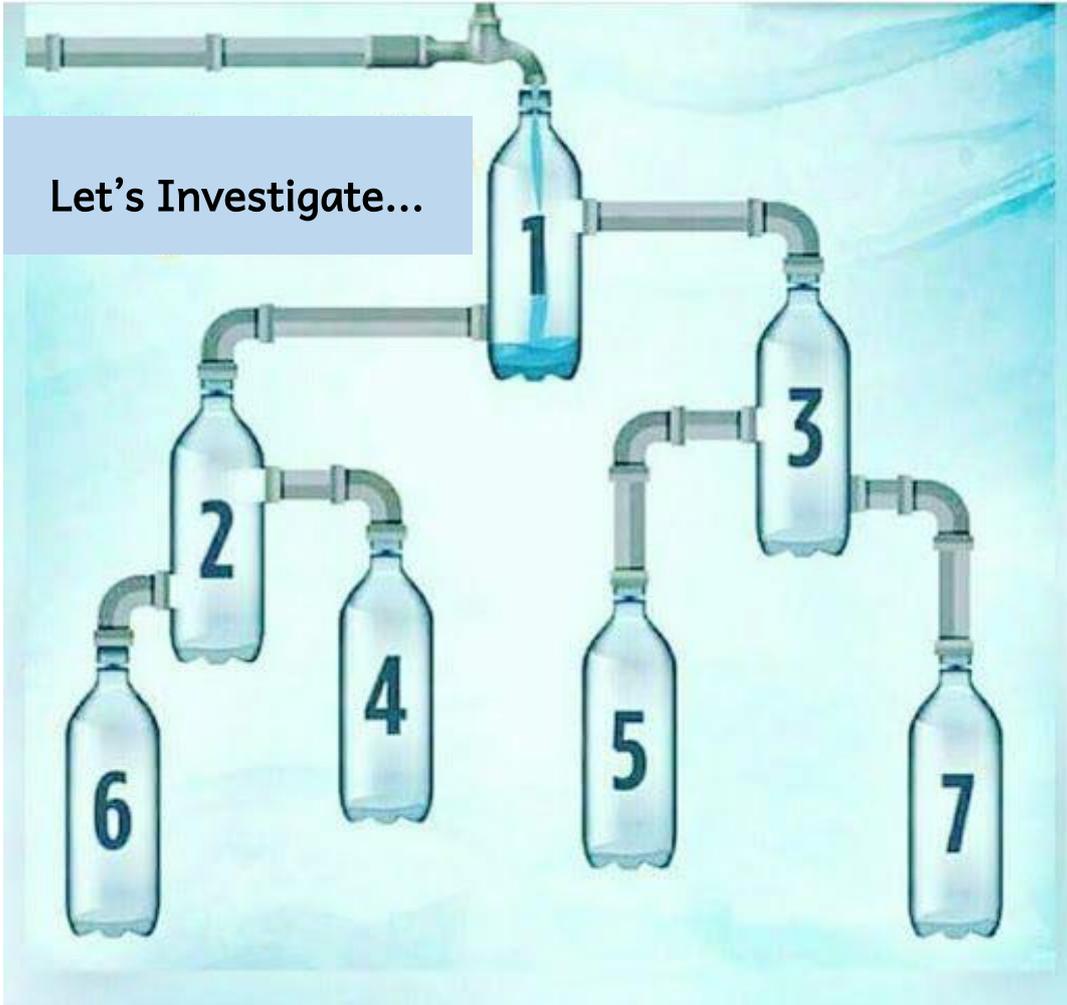
Which bottle is going to be filled up first? Bottle 6

In the boxes below, write the numbers of the different bottles, in order of how they are going to be filled up.

| 6 | 4 | 2 | 7 | 5 | 3 | 1 |

Filled First

Filled Last