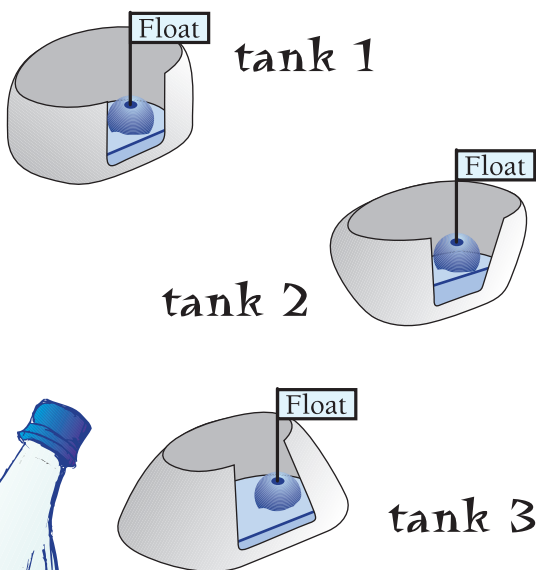


Fuel for Thought

- You need**
- water
 - a marker pen
- a measuring jug
 - plastic bottles of different shapes (they must hold at least 750 mL)
 - a classmate

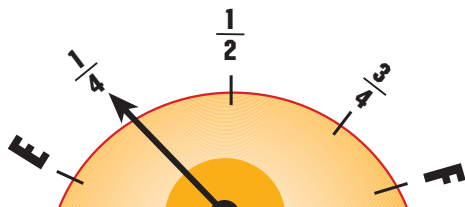
Activity One

The fuel gauge on a car uses a float to tell how much petrol or diesel is in the tank. Fuel tanks must fit into the structure of the car, so some of them are not regular shapes.



Imagine that each fuel tank above holds 40 litres of fuel.

The fuel gauge on each car shows:



Which tank has the most petrol left?
How do you know?

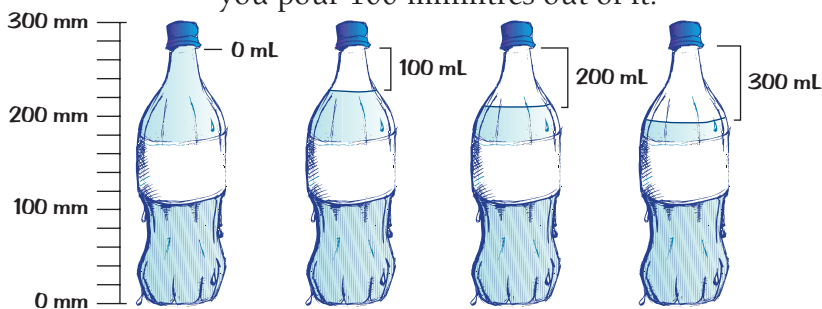
Activity Two

- Get a standard-shaped plastic bottle (such as a 1.5 litre soft-drink bottle).

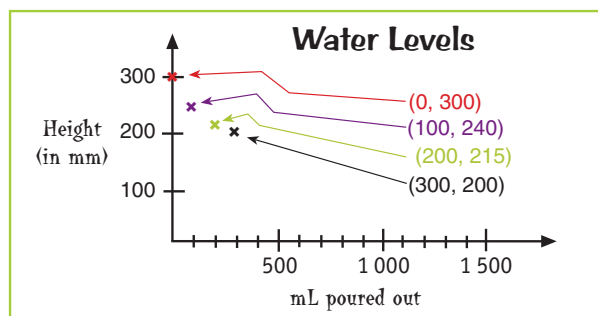
Measure its height and mark it from the base in 100 millimetre intervals.

Use the measuring jug to fill the bottle with exactly 1.5 litres of water.

Then check the water level each time you pour 100 millilitres out of it.



Record your results on a graph like this:



- If the graph was completed, what pattern would the points make? Investigate to find out.
 - At what level is a standard 1.5 litre bottle half-empty?
- With a classmate, gather data on the emptying pattern of other different-shaped bottles. Use a graph to display each pattern.