

### Science task:

Hi everyone, it's Mr Williams here. One of my favourite memories of this year was doing the bottle flip experiment with my class. It was very loud but lots of fun! Why not show your parents what we did that day?

In class, our independent variable (the thing we changed), was the amount of water, this time you can change a different variable to see what effect that has on landing your bottle.

For example: you could change the height of the drop, or the number of turns made in the air!

### Questions to consider:

1. What scientific question are you going to answer?
2. What will you change (the independent variable)?
3. What will stay the same?
4. How will we record our results?

You may want to use the table below to record your results.

Number of spins	Did it land? (1 <sup>st</sup> attempt)	Did it land? (2 <sup>nd</sup> attempt)	Did it land? (3 <sup>rd</sup> attempt)
1			
2			
3			
4			

#### **Bottle flip**

**TASK:** Find a plastic bottle and put some water inside. Practice flipping the bottle to land on its base. Now explore a variable which may have an effect on how often it lands. For example, you could try different: amounts of water, bottles, landing surfaces, start positions (stand/kneel/sit) or flipping techniques.

**What to record:** Make a table to record how many attempts it took to land the bottle flip for each condition.

*Do focus in Physics context*

