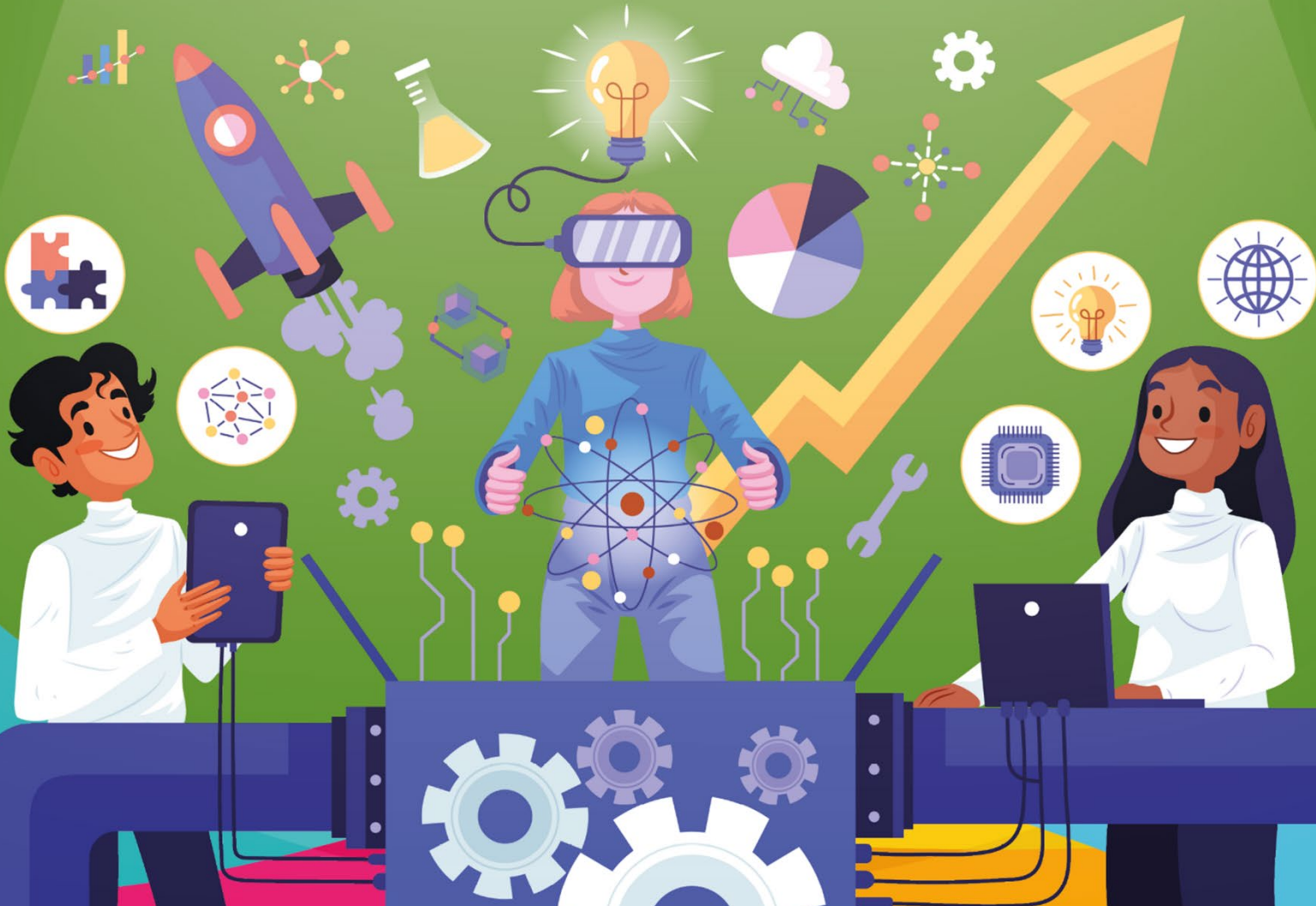




Science Lab

6



10. Unstoppable fountain

Topic: Water flow

Objective: Students will observe how water flows naturally – without any machine or engine making the flow.

Vocabulary: straw, flow, screw down, join, flexi, hole, bottom, funnel

Materials:

- Three plastic bottles	- Water
- Some straws	- Scissors
- A glue gun	- A nail – the size of the straws

Development:

- **Read and look at the pictures.**

Step 1. Use the glue gun to fix two bottle tops together.

Step 2. Use the nail to make two holes on the bottle tops – to the two which are together and to the third one.

Step 3. Make a hole at the bottom part of one of the bottles.

Step 4. Connect two bottles using the double-top you made.

Step 5. Seal some straws together so they can go through the bottles – one straw must reach the bottom of the bottle and the other one must get just some centimetres from the top – use the glue gun to reinforce the straws, so they don't move.

Step 6. Screw the bottle on top and make sure the straw which got just some centimetres from the top gets some centimetres away from the bottom in this side, and the long straw must get about 1 centimetre out the bottle in this side.

Step 7. Get another pair of straws joined – put this new straw into the third bottle top and glue it on the bottom of the bottle – make sure it gets about an inch away from the bottom.

Step 8. Cut off the top section of the third bottle to make a funnel and screw it down onto the top.

Step 9. Remove the labels from the bottles, so you can see what is happening inside.

Step 10. Look at picture 10 to make sure your structure matches the samples.

Step 11. Pour some water and let it go down until the bottom bottle is $\frac{3}{4}$ filled up, then flip the structure, so the water can go through filling up the bottle in the middle.

Step 12. Flip the structure back up and add a flexi-straw top, pour some more water and that's when the fountain must start working.



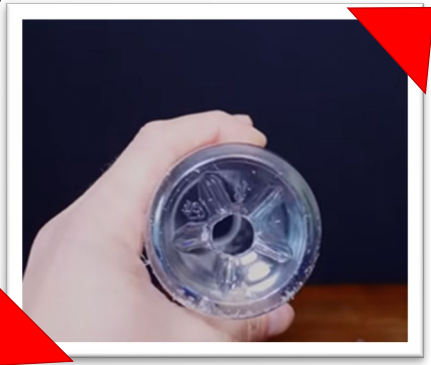
Step 1.



Step 2.



Step 3.



Step 4.



Step 5.



Step 6.



Step 7.



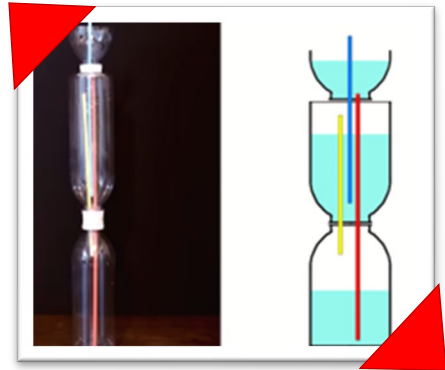
Step 8.



Step 9.



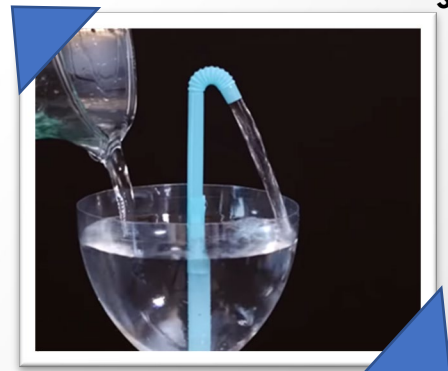
Step 10.



Step 11.



Step 12.



Tell us...

Read and answer the questions.

1. What did you use to fix pieces or parts together?

2. Were all straws in the structure the same size?

3. What makes the fountain work: air, pressure or weight?

4. When did you use the nail?

5. What did you have to do to fill up the bottle in the middle?

6. How could you use this project in real life?



Glue a picture of your project finished

Unstoppable fountain

Glue your
picture here
:)

1. What was your favourite part of the project? _____.

2. What, exactly, did you like the most?

_____.

3. Extra notes on what you observed during the project. _____

_____.

4. Can you see or apply the information from the project in real life? YES / NO

Explain: _____

_____.

5. Was it easy to get the materials for the project? YES / NO

Explain: _____

_____.

