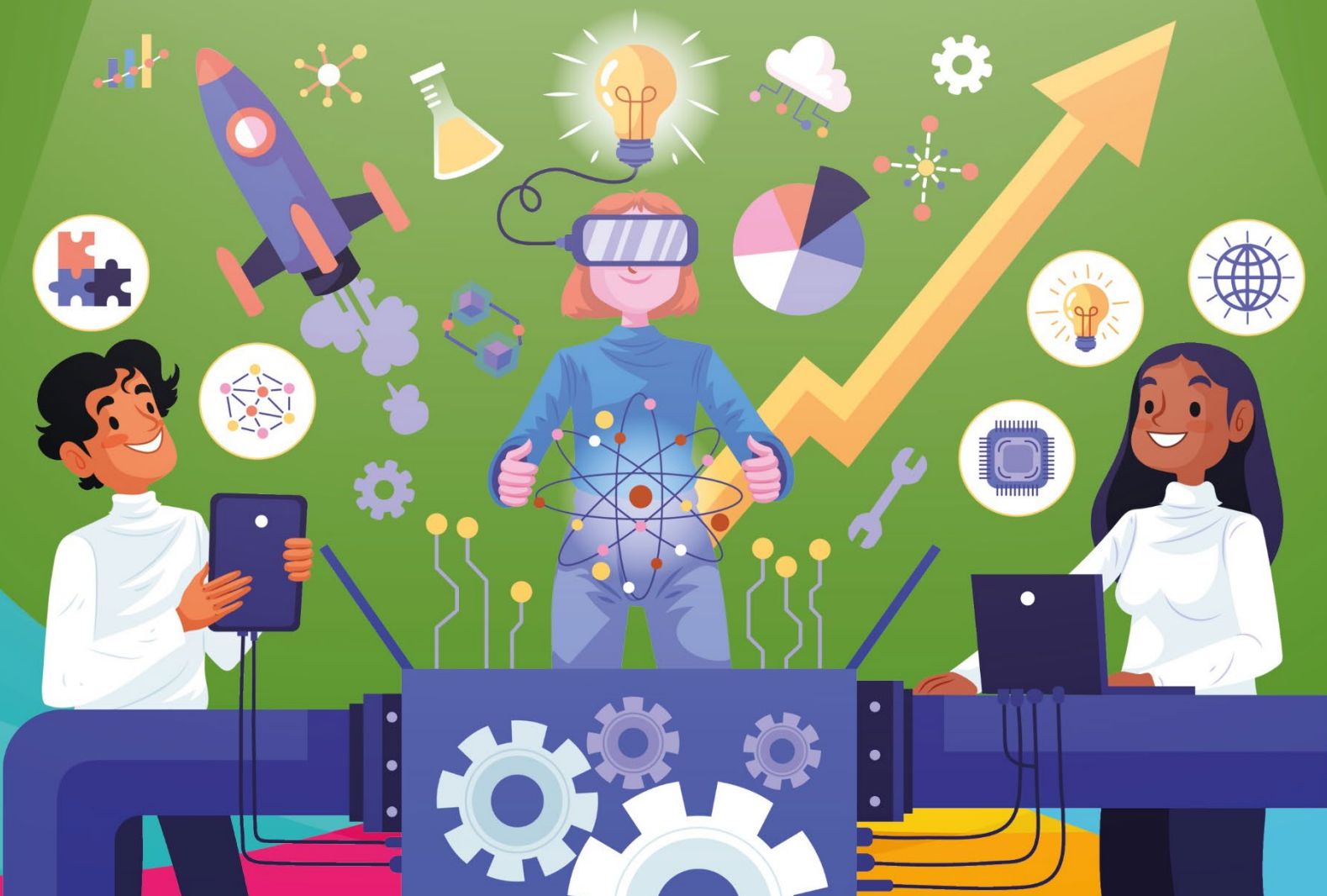




Science Lab

3



8. Water filter

Topic: Filtration and ecology

Objective: Students will learn about the principle of slow water filtration; they will discover a way to treat wastewater and help the environment by using natural filters.

Vocabulary: filtration, filter, stone, smooth

Materials:

- Some slightly large stones
- Some medium stones
- Some very small stones
- 1 k of sand
- 2 plastic bottles with a lid (1.5 litres)
- 1 litre of dirty water (the one that expels the washing machine from home)
- A cutter(s)
- Scissors
- Some cotton
- A ruler

Development:

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

Step 1. Cut off the bottom of a bottle – about 8 cm from bottom, put some cotton in the bottle and place it upside down into the part you cut off.

Step 2. Add some sand (about 2 inches) and some charcoal pieces.

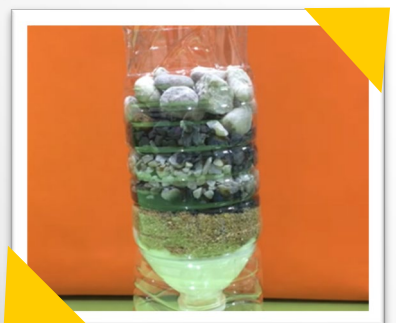
Step 3. Add the stones – from the smallest to the biggest ones.

Step 4. Pour the dirty water into the filter – slowly.

Step 1.



Step 3.



Step 2.



Step 4.





Tell us...

Look and read. Write the words on the lines.

- 0. Hard objects of different size you can find on the streets, in parks, everywhere.
- 1. This is used to clean water and make it drinkable.
- 2. Science that studies the environment.
- 3. When something stops being clean, it becomes...
- 4. You find this in a forest or park.
- 5. You find this at the beach, beige and soft.
- 6. Opposite of clean.
- 7. Object used to cut paper or fabric.
- 8. It's white and very soft, used to clean injuries with alcohol.

rocks

- rocks
- cotton
- polluted
- dirty
- sand
- element
- fire
- light
- scissors
- nature
- environmental
- garbage
- filter

Read and match the questions with the answers.

- 1. After filtration, the water was clear?
- 2. Is the quality of the water you got after filtration good enough for drinking?
- 3. What people should do in order to drink this water?
- 4. After boiling, is it really a good idea that people drink this water?

- _____ - **a.** A good action to take could be some boiling, but there might be some risk.
- _____ - **b.** No. it was not a specialized filtration process.
- _____ - **c.** Yes, it was.
- _____ - **d.** It looks clear, but it is not safe for drinking still.

Explain why you think people should not try to drink this filtrated water.

_____.

Glue a picture of your project finished!

Water filter

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: _____
_____.

