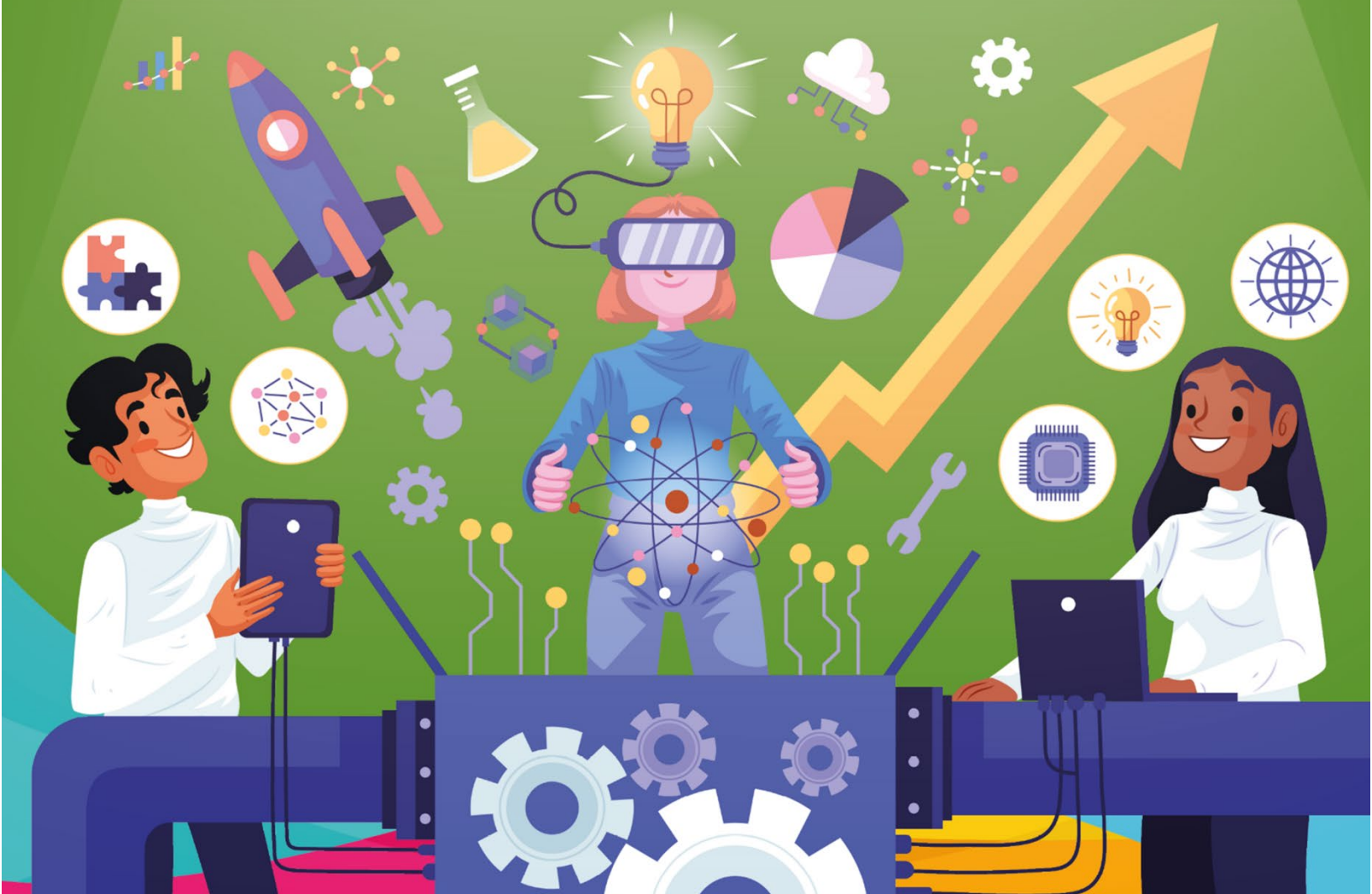
Science Lab

6



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.

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.	**rocks**	**rocks**
1.	This is used to clean water and make it drinkable.	_____	**cotton**
2.	Science that studies the environment.	_____	**polluted**
3.	When something stops being clean, it becomes…	_____	**dirty**
4.	You find this in a forest or park.	_____	**sand**
5.	You find this at the beach, beige and soft.	_____	**element**
6.	Opposite of clean.	_____	**fire**
7.	Object used to cut paper or fabric.	_____	**light**
8.	It's white and very soft, used to clean injuries with alcohol.	_____	**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: _____

_____.