

JR-SCIENTISTS

SODA BALLOON

Can you blow up a balloon using only a bottle of soda? Let's find out!

INSTRUCTIONS:

STEP 1: Open a soda and quickly place a balloon over the opening. What happens?

STEP 2: Pour about a half teaspoon of salt into the other balloon.

STEP 3: Attach the salted balloon to the other soda, but without letting the salt fall into the bottle.

STEP 4: Once secure, lift the balloon, allowing the salt to fall into the soda. What happens? Was there a difference in the two bottles?

SUPPLIES

2 Sodas
2 Balloons
Salt

THE SCIENCE

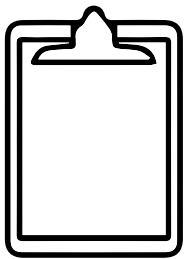
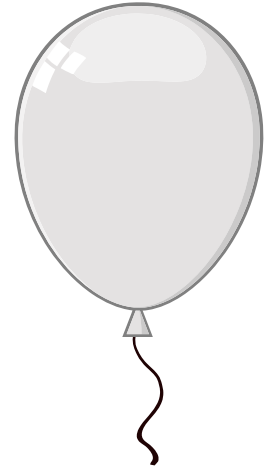
The fizzy bubbles in soda are called 'carbonation'. Carbon dioxide is the gas that creates them. When you open the bottle, the gas expands into bubbles, and the bubbles have to escape. The balloon grows in size because it is trapping the carbon dioxide bubbles!

Carbon dioxide is an important part of Earth's atmosphere. It is also called a 'greenhouse gas'. A greenhouse gas traps energy from the Sun, which helps keep the planet warm. This is known as the 'greenhouse effect'. Without this effect, the Earth would be far too cold for things to live on it.



Soda Balloon Observations

Use this worksheet to process and evaluate your work.



RECORD

What did you observe? What did you hear?

What was the difference between the two bottles? How were they similar?

What would happen if you add the same amount of salt to different types of soda?

The balloon expanded thanks to what type of gas?
