



EXPERIMENTING WITH AIR

YEAR 5 / CEIP LA VIÑA



Welcome to our laboratory.

Construct a hypothesis, carry out an experiment and become a great scientist!

STEP 1

What is a hypothesis?

A hypothesis is an idea with a possible explanation for a particular situation. We prove a hypothesis carrying out experiments.

STEP 2

Experiment

The experiment gives us data to analyse.

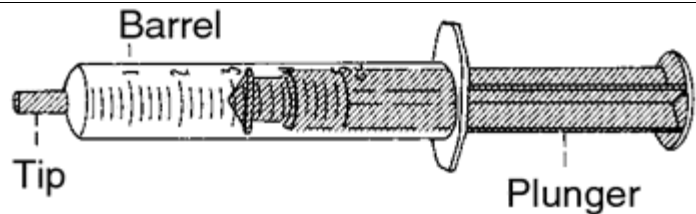
STEP 3

Conclusions

Analyse the data. The data prove (or not) the hypothesis.
Write a conclusion.

Parts of a syringe:

This is a syringe. Today we are going to use some syringes to carry out our experiments on gases.



GASES EXPAND

HYPOTHESIS: order the words and write a hypothesis:

occupy	space.	Gases	all	available
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EXPERIMENT / Make an air propelled rocket

Materials: a syringe, an air compressor, a plastic tube.

Attach one end of the plastic tube to the air compressor and the other to the tip of the syringe. Connect the air compressor

What happens?

CONCLUSIONS: Is the hypothesis correct?

CAN GASES BE COMPRESSED?

HYPOTHESIS: Write a hypothesis about gases and its shape.

EXPERIMENT / Compressing a gas

Materials: A syringe

Fill the barrel of the syringe with 10ml of air. Cover the tip with one finger and press the plunger as much as you can? Write the volume of air: _____

Has the mass of the air changed? _____

Has the volume of the air changed? _____

CONCLUSIONS: Is the hypothesis correct?

Did you know?

When air is compressed, it increases its pressure and exerts a force against its container.