

Experiment 1: What's in your soil?

Is soil the same everywhere? What do you think is in the soil where you live?
Can you form a hypothesis about what you will find in your soil?

Method

1. Dig up a cup of soil. Dig down a little way to get more than just the soil that's on top!
2. Look at the soil carefully. Record your observations in your log.
3. Now, spread a spoonful of the soil on a piece of white paper. Use a pencil to spread it out. Make a list in your log of everything you see now.
4. Did you find anything that you were not expecting? Do your results agree with your hypothesis? If you repeated the experiment in a different place, do you think you would get the same results?

Science explained

At the surface of the earth, soil contains plant and animal material called humus. It may also contain small rocks and pebbles. Look closer and you might see tiny minerals – these are clay, silt and sand. Clay feels slippery. Silt is gritty. Sand, like silt, is gritty but has larger grains.



Health and safety

Always wash your hands after you have touched soil. If you have a cut or graze, cover it with plaster before touching soil.



Photo by Hush Naidoo Jade Photography on Unsplash

Look carefully at the soil you dig up.
What do you notice?

How to do an experiment like a scientist:



- Start a **log**. Write down your questions and **hypothesis**.
- Plan step-by-step how you can test the hypothesis. This is called the procedure or **method**.
- Carry out the experiment and **record** everything that happens in your log. These are your **observations**.
- Compare your results with your hypothesis. Was your hypothesis right or wrong? What did you learn? The answer is your **conclusion**.

Glossary

Conclusion

What you learn from the results of an experiment.

Experiment

Organised way of testing an idea.

Hypothesis

Suggested statement or explanation that can be tested

Log

Written notes about an experiment

Method

Steps followed to carry out an experiment

Observations

Something that you notice (using any of your five senses!)

Results

What happens in an experiment