

Vocabulary

In Science, it is important to use keywords when describing processes and investigations. In today's lesson, we will be running an investigation and describing what we observe. Let us look at some of the keywords we will be using today and discuss their meanings.



Aim

What is the purpose of the investigation; what are you trying to find out?

The aim of this investigation is to ...



Equipment / Resources

What equipment or resources do you require to enable you to carry out your investigation accurately.

To carry out my Science investigation, I will need the following:



Method

How will you carry out your Science investigation to ensure accurate results?



Risk Assessment

How do you ensure you stay safe during your Science investigation?

Hazard:

What are you using or doing that could be dangerous?

Risk:

How could it harm you?

Control:

What can you do to ensure you stay safe?



Variables

In all Science investigations:

The independent variable is...

What you change.

The dependent variable is...

What you measure.

The control variables are...

What you keep the same to ensure a fair test.



Prediction

What do you think will happen?

Why do good scientists make predictions?

A good scientist will always make predictions before an investigation to state what they think will happen.

I think...

Because...



Results

Do you remember why it is important to record your results?

A good scientist will always record their results so other people can see what you have found out.



Conclusion

Think back to the aim of your Science investigation.

Make a judgement on your investigation and your findings.

What did you find out?

From my investigation, I can conclude...



Evaluation

Think about how your investigation went.

What went well?

What improvements could you make?



Making a Comparison

You will be given 10 different objects and you have to put them in order of smoothness.

Which is the smoothest going to which is the roughest.

Use your fingers, fingertips and fingernails to help you.

Observing And Collecting Techniques

1. Tree beating: Place a sheet under a branch and gently shake the branch and collect animals that fall on to the sheet
2. Sweep net: Use a sweep net to push through long grasses to see what you collect
3. Pond Dipping: Use a fishing net to collect animals living in ponds
4. Pitfall trap: Dig a small hole in the ground and place a container inside the hole. Animals walking by may fall in
5. Pooter: Use a pooter to collect small insects into a container

Investigating Permeability Of Soil

Pour soil into a sieve.

Place sieve on top of your measuring container to collect water.

Pour 250ml of water over the soil.

Set your timer going.

Measure the amount of water that has been collected in 3 minutes.

Place soil in provided box and rinse out sieve, empty out measuring container and repeat with other soil samples.

Measure Temperatures of Everyday Objects

A good scientist will always make predictions before an investigation to state what they think will happen and why it may happen.

Example: I think the glass of water outside in the playground will be warmer than the glass of water in the classroom because The Sun is heating it up.



Conductors v Insulators

Fill a pan full of hot water and place in the middle of your table.

Place the three spoons in to the hot water.

Start your stop clock and time five minutes.

After five minutes, feel the handle of each spoon to see how it feels.

Record your findings in your table.



Investigating Electrical Conductors

Set up a circuit with one bulb and one battery.

Check that everything is working correctly. You will know it is if the bulb lights up.

