

# Science Knowledge Organiser

## Working Scientifically (Term 6)

## Year 6

### Our learning

In our science lessons this term, we will be working scientifically with our knowledge of adaptation and inheritance. This is part of the **biology** aspect of science and will help us to develop the skills to become a scientist.

We will look at using our scientific knowledge to analyse, present and explain **patterns** that we find.

Make an observation

Ask a question

Plan an investigation

Make a hypothesis

Conduct your investigation

Record your results

Draw a conclusion



### Information

#### Stick your beak in!

Birds have a variety of beak shapes.

A bird's beak shape is directly related to the food that they eat and what is available in their environment.

Animals adapt to their environments over time.

Alfred Russel Wallace worked with Charles Darwin on 'The Theory of Evolution'.



### As a scientist I will...

- Select and plan a suitable enquiry and explain the variables that need to be controlled.
- Choose the most appropriate equipment and use it to take accurate measurements.
- Make predictions using scientific vocabulary based on my ideas from other investigations.
- Make decisions about the observations I make and use my results to suggest further tests.
- Identify and explain relationships in my data saying the difference between fact and opinion.
- Choose the best way to record and report results.
- Identify and explain patterns in the natural environment.
- Find evidence that supports or refutes my findings.
- Say how valid my conclusion is and how I might improve the investigation next time.

### Vocabulary

**Fair test**– A test that controls all but one variable when attempting to answer a scientific question

**Plan**– A method for conducting a test or experiment

**Accuracy**– How close something is to what it should be

**Systematic**– To plan out and complete in a specific way or order.

**Quantitative measurements**– Information that is described in numbers

**Hypothesis**– An educated guess, or a guess you make based on information you already know.

**Variable**– Any one of the elements of the test which could be changed

**Refute**– to prove a theory wrong

**Evolution**– Evolution is the theory that all the kinds of living things that exist today developed from earlier types

**Conclusion**– a summary of what has been found out during an investigation

**Biology**– The study of living things

