



## Working scientifically

(y3 + 4)

- I know how to ask relevant scientific questions.
- I know how to use observations and knowledge to answer scientific questions.
- I know how to set up a test to compare two things.
- I know how to set up a fair test and explain why it is fair.
- I make careful and accurate observations, including the use of standard units.
- I know how to use equipment including thermometers and data loggers to make measurements.
- I gather, record, classify and present data in different ways to answer scientific questions.
- I know how to use diagrams, keys, bar charts and tables ; using scientific language.
- I know to use findings to report in different ways, including oral written explanations, presentations.
- I know how to draw conclusions and suggest improvements.
- I know how to make a prediction with a reason.
- I know how to identify similarities and differences.

## Biology

### Plants

- I know the function of different parts of flowering plants and trees.
- I know what different plants need to help them survive.

### Animals including humans

- I know about the importance of a nutritious, balanced diet.
- I know how nutrients, water and oxygen are transported within animals and humans.
- I know about the skeletal system of a human.
- I know about the muscular system of a human.
- I know about the purpose of the skeleton in humans and animals.

## Chemistry

### Rocks

- I compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.
- I know how fossils are formed.
- I know how soil is made.
- I know about and explain the difference between sedimentary , metamorphic and igneous rock.

## Physics



### Light

- I know what dark is (the absence of light)
- I know that light is needed in order to see.
- I know that light is reflected from a surface.
- I know and demonstrate how a shadow is formed.
- I explore shadow size and explain the changes.
- I know the danger of direct sunlight and describe how to keep protected.

### Forces and magnets

- I know about and describe how objects move on different surfaces.
- I know how some forces require contact and some do not, giving examples.
- I know about and explain how objects attract and repel in relation to objects and other magnets.
- I predict whether objects will be magnetic and carry out an enquiry to test this out.
- I know how magnets work.
- I predict whether magnets will attract or repel and give a reason.