Science

Working Scientifically

- I can plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- I can take accurate measurements, using a range of scientific equipment taking repeat readings when appropriate.
- I can record complex data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- I can use test results to make predictions to set up further comparative and fair tests.
- I can report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- I can identify scientific evidence that has been used to support or refute ideas or argument.

Light

- I can show that light appears to travel in straight lines.
- I can use the explanation that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.
- I can demonstrate and explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.
- I can demonstrate that light travels in straight lines to show why shadows have the same shape as the objects that cast them.

Electricity

- I can show that the brightness of a lamp or the volume of a buzzer depends on the number and voltage of cells used in the circuit.
- I can compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.
- I can draw a diagram using recognised symbols to represent a simple circuit

Animals including humans

- I can identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.
- I can recognise the impact of diet, exercise, drugs and lifestyle on the way the body functions.
- I can describe the ways in which nutrients and water are transported within animals, including humans.

Evolution and Inheritance

- I can explain that the kinds of living things that live on the earth now are different from those that inhabited the Earth millions of years ago and that fossils provide this information.
- I can explain that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.
- I can give examples of how animals and plants are adapted to suit their environment in different ways and can explain that adaptation may lead to evolution.

Living Things and their Habitats

- I can give reasons for classifying plants and animals based on specific characteristics
- I can describe how plants, animals and micro-organisms are classified into broad groups according to common observable characteristics and based on similarities and differences.