**Science Overview Year 6**

**Working Scientifically**

• planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

 • taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate

• recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

• using test results to make predictions to set up further comparative and fair tests

 • reporting and presenting 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

• identifying scientific evidence that has been used to support or refute ideas or arguments.

**Living Things & Their Habitats**

 • describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals

• give reasons for classifying plants and animals based on specific characteristics.

 **Animals (including humans)**

• identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood

 • recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function

• describe the ways in which nutrients and water are transported within animals, including humans.

**Evolution & Inheritance**

• recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago

 • recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents

• identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

**Light**

 • recognise that light appears to travel in straight lines

• use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye

• 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

• use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

**Electricity**

• associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit

• 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

• use recognised symbols when representing a simple circuit in a diagram.