

## **Science : Year 6**

### **Working Scientifically**

Through the year, the children will use the following practical scientific methods, processes and skills:  
planning different types of scientific enquiries to answer questions, including recognising and controlling variables,  
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,  
using test results to make predictions to set up further 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.

### **Autumn Term – Healthy Bodies**

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.

### **Autumn Term – 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.

**Spring Term - Evolution and 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.

**Spring Term – 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.

**Summer Term – Classify living things**

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.

**Summer Term – The Titanic**

This final topic focuses on developing scientific skills within a practical context