Science
Year 6 Scheme of Work

Statutory requirements (National Curriculum)	Suggested activities Autumn Term Spring Term Summer Term
Living things and 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	Meet Linnaeus and learn about his classification system Create classification routes for a range of living things, identifying relatedness Play an odd one out game and identify similarities and differences between animal, micro-organism and plant classifications Group animals, microorganisms and plants into broad groups then subgroups according to observable features Create a feature-led sweet classification system Design and test out a classification key for birds, bees or butterflies Write scientific descriptions of unusual living things from around the world Classify unusual living things using their descriptions and online research
Animals including humans • identify and name the main parts of the human circulatory system • describe the functions of the heart, blood vessels and blood	Concept cartoons and vocab exploration. Composition of blood including Blood Haiku (literacy link) Blood groups including a look at donor recipient compatibility.

• 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	Structure of the human heart. Heart rate investigation with graph work. Going deeper – Healthy and unhealthy hearts response to regular exercise.
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	Analysed concept cartoons. Identify inherited and environmental characteristics. Understand inherited characteristics are genetic. The differences between dominant and recessive genes. How animals and plants have adapted to survive. Research variation and possible advantages of variation. Advantages and disadvantages of certain characteristics. Extreme survival – How organisms have evolved to survive in extreme conditions. Beak type investigation based on Darwin's Finches Including graph work.
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	Concept cartoons and vocab Series of investigations including how light travels, how objects are seen, how shadows are formed, natural and artificial sources of light and how mirrors work. Angles of incidence and reflection. Investigate how light travels

• use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them	Create periscopes and investigate the best materials to create them Discussion of Periscopes
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	Concept cartoons and vocab Explore and investigate the effects of power input and out changes by looking at increasing voltage and number of outputs. Draw circuit diagrams including circuit symbols. Draw a circuit diagram with a summary of the brightness, volume and speed of components within it Annotate their circuit diagram with explanations of the role of resistance in making components work Feedback on other's designs Use feedback to improve their design