

Years 5 and 6 Cycle 2	Autumn	Spring	Summer
	<p>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 microorganisms, plants, and animals. Give reasons for classifying plants and animals based on specific characteristics.</p> <p>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.</p> <p>Renewable energy (sustainability) Children will learn about renewable energy and how it can be used to generate electricity. They will compare the use of renewable energy to the burning of fossil fuels and the impact they have on the environment. Children should understand that using non-renewable energy sources such as coal, oil and natural gas is contributing to global warming. (National Curriculum Links: Working Scientifically)</p>	<p>Light Recognise that light travels 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.</p> <p>Light Pollution (sustainability) In this sustainability block, children further their understanding of light by exploring light pollution and its impact on living things on Earth. (National Curriculum Links: Working Scientifically)</p> <p>The circulatory system 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.</p> <p>Diet, drugs and lifestyle In this block, children explore the impacts of diet, drugs and lifestyle on overall body health. They should make links to learning in the previous circulatory system block as much as possible to identify how diet can have positive or negative effects on the heart.</p>	<p>Variation Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</p> <p>Adaptations Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p> <p>Fossils Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.</p> <p>Themed Projects (Year 7 Ready) Projects in melting points and thermal conductivity.</p>