





## Science Curriculum Rolling Programme

 = includes coverage of sustainability topics

(Y1-6 objectives covered through White Rose Science sustainability units)

### EYFS


One Year Programme					
Aut1	Aut2	Spr1	Spr2	Sum1	Sum2
<b>Autumn</b> BQ: What colour are the leaves?	<b>My body</b> BQ: How can I look after myself?	<b>Compare &amp; contrast environments</b> BQ: Where is a camel from?	<b>Spring</b> BQ: What is best material for the Three Pigs to build a house from	<b>Growth</b> BQ: How do things change/grow over time?	 <b>Recycling</b> BQ: Is the world changing a bad thing?

# Years 1 and 2

## Rolling programme - Cycle A 2025/2026




At least one sustainability topic to be covered each year across a two-year cycle

Aut1	Aut2	Spr1	Spr2	Sum1	Sum2
<p><b>Material world</b></p> <p>-Distinguish between an object and the material from which it is made. Identify and name a variety of everyday materials incl wood, plastic, glass, metal, water and rock.</p> <p>-Describe the simple physical properties of a variety of materials.</p> <p>-Compare and group together a variety of everyday materials on the basis of their simple properties.</p> <p>BQ: Can we improve on the way we live our lives today?</p>	<p><b>Material world</b></p> <p>-Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, rock, brick, paper and cardboard for particular uses.</p>	<p><b>Looking after plants</b></p> <p>-Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>BQ: Do I grow in the same way as a tomato?</p> <p> <b>Caring for our planet (y1)</b></p>	<p><b>Looking after plants</b></p> <p>Observe changes across the four seasons. Observe and describe weather associated with the seasons and how day length varies</p>	<p><b>The Human Body and staying healthy.</b></p> <p>-Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p> <p>- Identify and name a variety of common animals that are carnivores, herbivores and omnivores. <i>Identify</i>, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p> <p>BQ: Should we be part of the food chain?</p>	<p><b>The Human Body and staying healthy.</b></p> <p>-Notice that animals, including humans, have offspring which grow into adults.</p> <p>-Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p>-Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p>

## Rolling Programme – Cycle B 2026/2027



At least one sustainability topic to be covered each year across a two-year cycle



Aut1	Aut2	Spr1	Spr2	Sum1	Sum2
<p style="text-align: center;"><b>Animal Safari</b></p> <p>-Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. <b>Repeat objective for consolidation.</b></p> <p>-Identify and name a variety of common animals that are carnivores, herbivores and omnivores. <b>Repeat objective for consolidation.</b></p> <p>-Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</p> <p>- Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</p>	<p style="text-align: center;"><b>Animal Safari</b></p> <p>-Explore and compare the differences between things that are living, dead, and things that have never been alive.</p> <p>-Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other,</p> <p>-Identify and name a variety of plants and animals in their habitats, including microhabitats</p> <p>Notice that animals, including humans, have offspring which grow into adults. <b>Repeat objective for consolidation.</b></p>	<p style="text-align: center;"><b>Changing Materials</b></p> <p>-Distinguish between an object and the material from which it is made. <b>Repeated from cycle 1 for consolidation.</b></p> <p>-Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</p> <p>-Describe the simple physical properties of a variety of everyday materials.</p> <div style="text-align: center;">  <p><b>Plastic (Y2)</b></p> </div>	<p style="text-align: center;"><b>Changing Materials</b></p> <p>-Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p>	<p style="text-align: center;"><b>How does your garden grow?</b></p> <p>Name common plants and describe the basic structure of flowering plants, including deciduous and evergreen.</p> <p>-Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p><b>Revisit of objective to consolidate.</b></p>	<p style="text-align: center;"><b>How does your garden grow?</b></p> <p>Observe and describe how seeds and bulbs grow into mature plants</p>

# Years 3 and 4

Rolling Programme cycle A - 2025 /2026





At least one sustainability topic to be covered each year across a two-year cycle

Aut1	Aut2	Spr1	Spr2	Sum1	Sum2
<p><b>Animals, Food Chains and the Digestive System</b>  <i>BQ: What does it mean to be healthy?</i></p> <p>Describe the simple functions of the digestive system in humans. Identify different teeth in humans and name their functions. Know how to keep my teeth healthy. Identify and compare teeth of carnivores, herbivores and omnivores. Construct and interpret a variety of food chains identifying producers, predators and prey by examining animal faeces (poo). Identify animal habitats in the locality and observe what they eat.</p>	<p><b>Sound</b>  <i>BQ: Does a sound happen if nobody is around to hear it?</i></p> <p>To identify how sounds are made, associating some of them with something vibrating. (Vibration stations) Recognise that vibrations from sounds travel through a medium to the ear. (String phones) Find patterns between pitch of a sound and features of the object that produced it. Find patterns between the volume of a sound and the strength of the vibrations that produced it. Recognise that sound gets fainter as the distance from the sound source increases</p>	<p><b>Materials: Solids, liquids and Gases</b>  <i>BQ: Where does a puddle go?</i></p> <p>Compare and group materials together, according to whether they are solids, liquids or gases. Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius. Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p>	<p><b>Plants</b>  <i>BQ: What do plants need to grow as strong and healthy as possible?</i></p> <p>Identify and describe the functions of different parts of a flowering plant. Explore the requirements of plant life and growth. Investigate the way in which water is transported within plants. Explore the part that flowers play in the lifecycle of flowering plants including pollination, seed formation and seed dispersal.</p>	<p><b>Electricity</b>  <i>BQ: Why are insulators as important as conductors?</i></p> <p>Identify common appliances that run on electricity. Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. Recognise some common conductors and insulators, and associate metals with being good conductors.</p>	<p> <b>Biodiversity (Y3)</b></p> <p> <b>Energy (Y4)</b></p>

## Rolling Programme Cycle B - 2026/ 2027



At least one sustainability topic to be covered each year across a two-year cycle

Aut1	Aut2	Spr1	Spr2	Sum1	Sum2
<p><b>Light and Shadow</b>  <i>BQ: How does the sun make light?</i></p> <p>To recognise we need light in order to see things and that dark is the absence of light.            Light is reflected from surfaces.            Recognise that light from the sun can be dangerous and that there are ways to protect your eyes.            Recognise that shadows are formed when light from a source is blocked by an opaque object.            Find patterns in the way that the shadows change.</p>	<p><b>Forces and Magnets</b>  <i>BQ: How have our ideas about forces changed over time?</i></p> <p>Compare how things move on different surfaces.            Notice that some forces need contact between two objects, but magnetic forces can act at a distance.            Observe how magnets attract or repel each other and attract some materials and not others.            Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet and identify some magnetic materials.            Describe magnets as having two poles.            Predict whether two magnets will attract or repel each other, depending on which poles are facing.</p>	<p><b>Living Things and Their Habitats</b>  <i>BQ:</i></p> <p>Recognise that living things can be grouped in a variety of ways.            Explore and use classification keys to help group.            Identify and name a variety of living things in the environment.            Recognise that environments can change and this can sometimes pose dangers to living things.</p>	<p><b>Human Skeleton and Nutrition</b>  <i>BQ: What makes you, you?</i></p> <p>Identify that humans and some other animals have skeletons and muscles for support, protection and movement.            Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.</p>	<p><b>Rocks and Fossils</b>  <i>BQ: Can learning about the past help us learn about the future?</i></p> <p>Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.            Describe in simple terms how fossils are formed when things that have lived are trapped within rock.            Recognise that soils are made from rock and organic matter.</p>	<p> <b>Food waste (Y3)</b></p> <p> <b>Deforestation (Y4)</b></p>

# Years 5 and 6

Rolling Programme - cycle A - 2025/2026





At least one sustainability topic to be covered each year across a two-year cycle

Aut1	Aut2	Spring	Sum1	Sum2
<p><b>Properties and changes of materials</b></p> <p>BQ: Is everlasting ice possible?</p> <p> <b>Plastic Pollution (Y5)</b></p> <p>Compare and group together everyday materials based on their properties, including hardness, solubility, transparency, conductivity and response to magnets. Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution. Use knowledge of solid, liquid and gas to decide how mixtures might be separated including through filtering, sieving and evaporation. Give reasons based on evidence from comparative tests for the particular uses of everyday materials including metals, wood and plastic. Demonstrate that dissolving, mixing and changes of state are reversible changes. Explain that some changes result in the formation of new materials and this kind of change is not usually reversible including changes associated with burning and the action of acid on bicarbonate of soda.</p>	<p><b>Forces</b></p> <p>BQ: Can the weak overcome the strong?</p> <p>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. <i>(The act of gravity on our lives)</i> Identify the effects of air resistance, water resistance and friction, which act between moving surfaces. Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p>	<p><b>Animals including Humans, life cycles / Living things &amp; their habitats</b></p> <p>BQ: What does it mean to lead and happy and fulfilling life?</p> <p>Describe the changes as humans develop from birth to old age.</p> <p>Describe the differences in life cycles of a mammal, an amphibian, an insect and a bird Describe the life process of reproduction in some plants and animals</p>	<p><b>Light</b></p> <p>BQ: Does light ever stop travelling?</p> <p>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.</p>	<p> <b>Light Pollution (Y6)</b></p> <p>What is light pollution and how can we reduce it?</p> <p>Working scientifically – Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.</p>

## Rolling Programme cycle B - 2026 / 2027



At least one sustainability topic to be covered each year across a two-year cycle

Aut1	Aut2	Spr1	Spr2	Sum1	Sum2
<p><b>Evolution and Inheritance</b></p> <p>BQ: Do you always have to agree?</p> <p>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.</p>	<p><b>Earth &amp; Space</b></p> <p>BQ: Do I have what it takes to be an astronaut?</p> <p>Describe the movement of the Earth and other planets, relative to the sun in the solar system. Describe the movement of the moon relative to the Earth. Describe the Sun, Earth and Moon as approximate spherical bodies. Use Earth rotation to explain day and night due to the apparent movement of the sun across the sky.</p>	<p><b>Living things and classification</b></p> <p>BQ: Should everything have a label?</p> <p>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.</p>	<p><b>Animal including humans, healthy living</b></p> <p>BQ: What does healthy look like?</p> <p>Identify the main parts of the human circulatory system and describe the function of the heart, blood vessels and blood. Describe the ways in which nutrients and water and transported within animals including humans. Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</p>	<p><b>Electricity</b></p> <p>BQ: Does electricity improve your life?</p> <p>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. Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. Use recognised symbols when representing a simple circuit in a diagram.</p>	<p> <b>Renewable energy (Y6)</b></p> <p>What is renewable energy and how can we use it to generate electricity?</p> <p> <b>Global Warming (Y6)</b></p> <p>What is global warming and how can we help to reduce it?</p>