



Federation of St. Cuthbert's and St. Sebastian's Catholic Primary Schools

SCIENCE : CURRICULUM : LONG TERM PLAN



	AUTUMN TERM	SPRING TERM	SUMMER TERM
Y1	<p><u>Animals including Humans</u></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Identify, name, draw & label the basic parts of the human body. Name which part of the body is associated with each sense. <p><u>Animals including Humans</u></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Identify & name a variety of common animals including fish, amphibians, reptiles, birds & mammals. Identify & name a variety of common animals that are carnivores, herbivores & omnivores. 	<p><u>Everyday materials</u></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Describe the simple properties of a variety of everyday materials. Compare & group together a variety of everyday materials on the basis of their simple properties. <p><u>Plants</u></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Identify & name a variety of common wild and garden plants, including deciduous & evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees. 	<p><u>Seasonal Change</u></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> observe changes across the four seasons observe and describe weather associated with the seasons and how day length varies.
Y2	<p><u>Uses of Everyday Materials</u></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. 	<p><u>Uses of Everyday Materials</u></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. 	<p><u>Plants</u></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Describe how seeds and bulbs grow into mature plants. Describe how plants need water, light and a suitable temperature to grow and stay healthy.

	<p><u>Living Things and Their Habitats</u></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Describe how different habitats provide for the basic needs of different kinds of animals and plants. Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain. 	<p><u>Animals Including Humans</u></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Describe the basic needs of humans for survival (water, food and air). Describe the importance for humans of eating the right amounts of different types of food, and hygiene. 	
Y3	<p><u>'Earth Rocks'</u></p> <p><i>Rocks, Soils & Fossils</i></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> 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. <p><u>'Food and our bodies'</u></p> <p><i>Animals Including Humans</i></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> 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. Identify that humans and some other animals have skeletons and muscles for support, protection and movement. 	<p><u>'Mirror, mirror'</u></p> <p><i>Light and Shadows</i></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Recognise that shadows are formed when the light from a light source is blocked by a solid object. Find patterns in the way that the sizes of shadows change. <p><u>'How does your garden grow?'</u></p> <p><i>Plants</i></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Identify and describe the functions of different parts of flowering plants: roots, stem / trunk, leaves and flowers. Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant 	<p><u>'Opposites Attract'</u></p> <p><i>Forces & Magnets</i></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> 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. Predict whether two magnets will attract or repel each other, depending on which poles are facing.

<p>Y4</p>	<p><u>'What's that sound?'</u> <i>Sound</i> <u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Identify how sounds are made, associating some of them with something vibrating. Find patterns between the volume of a sound and the strength of the vibrations that produced it. <p><u>'Living Things'</u> <i>Living Things & Their Habitats</i> <u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> 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 their local and wider environment. 	<p><u>'Looking at States'</u> <i>States of Matter</i> <u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> 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 (°C). Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. <p><u>'Teeth and Eating'</u> <i>Animals Including Humans</i> <u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Describe the simple functions of the basic parts of the digestive system in humans. Construct and interpret a variety of food chains, identifying producers, predators and prey. 	<p><u>'Power it up!'</u> <i>Electricity</i> <u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.
<p>Y5</p>	<p><u>'Out of this World'</u> <i>Earth & Space</i> <u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> 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. <p><u>'Material World'</u> <i>Properties & Changes of Materials</i> <u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. 	<p><u>'Circle of Life'</u> <i>Living Things & Their Habitats</i> <u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals. <p><u>'Let's get Moving'</u> <i>Forces</i> <u>CORE KNOWLEDGE</u></p>	<p><u>'Growing Up and Growing Old'</u> <i>Animals Including Humans</i> <u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Describe the changes as humans develop to old age.

	<ul style="list-style-type: none"> Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. 	<ul style="list-style-type: none"> Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. Identify the effects of air resistance, water resistance and friction that act between moving surfaces Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. 	
Y6	<p><u>'Classifying Living Things'</u> <i>Living things and their habitats</i></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> 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><u>'Healthy Bodies'</u> <i>Animals, including humans</i></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. Describe the ways in which nutrients and water are transported within animals, including humans 	<p><u>Evolution & Inheritance</u></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. <p><u>Light</u></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> 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. 	<p><u>Electricity</u></p> <p><u>CORE KNOWLEDGE</u></p> <ul style="list-style-type: none"> 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.