

St. Hugh's Catholic Primary School Progression Map

Area of Learning and Development	Aspect	Range 3	Range 4	Range 5	Range 6
Understanding the world	The World	<p>Is curious and interested to explore new and familiar experiences in nature: grass, mud, puddles, plants, animal life</p> <p>Explores objects by linking together different approaches: shaking, hitting, looking, feeling, tasting, mouthing, pulling, turning and poking</p> <p>Remembers where objects belong</p> <p>Matches parts of objects that fit together</p>	<p>Notifies detailed features of objects in their environment</p> <p>Can talk about some of the things they have observed such as plants, animals, natural and found objects</p> <p>Enjoys playing with small world reconstructions, building on first-hand experiences</p>	<p>Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world</p> <p>Talks about why things happen and how things work</p> <p>Developing an understanding of growth, decay and changes over time</p> <p>Shows care and concern for living things and the environment</p> <p>Begin to understand the effect their behaviour can have on the environment</p>	<p>Look closely at similarities, differences, differences, patterns, and change in nature</p> <p>Knows about similarities and differences in relation to places, objects, materials and living things</p> <p>Talks about the features of their own immediate environment and how environments might vary from one another</p> <p>Makes observations of animals and plants and explains why some things occur, and talks about changes</p>

Early Learning Goal: Children explore the natural world around them, making observations and drawing pictures of animals and plants; know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class; understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

Strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge of content	<p>To identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</p> <p>To identify and name a variety of common animals that are carnivores, herbivores and omnivores</p>	<p>To explore and compare the difference between things that are living, dead and things that have never been alive</p> <p>To identify that most living things live in habitats to which they are suited and describe how</p>	<p>To identify and describe the functions of different parts of a flowering plant: roots, stem/trunk, leaves and flowers</p> <p>To explore the requirements of plants for life and growth (air, light, water, nutrients from</p>	<p>To describe the simple functions of the basic parts of the digestive system in humans</p> <p>To identify the different types of teeth in humans and their simple functions</p> <p>To construct and interpret a variety of</p>	<p>To compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets</p>	<p>To 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</p>

St. Hugh's Catholic Primary School Progression Map

Animals including humans	To describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets) To identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	different habitats provide for the basic needs of different kinds of animals and plants and how they depend on each other To identify and name a variety of plants and animals in their habitats, including micro-habitats To 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	soil and room to grow) and how they vary from plant to plant To investigate the way in which water is transported within plants To explore the parts that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal	food chains, identifying producers, predators and prey To recognise that living things can be grouped in a variety of ways To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment To recognise that environments can change and that this can sometimes pose dangers to living things	To know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution To use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating To give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic	To give reasons for classifying plants and animals based on specific characteristics To identify and name the main parts of the human circulatory system and describe the functions of the heart, blood vessels and blood To recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function To describe the ways in which nutrients and water are transported within animals, including humans
Living things and their habitats						
Materials	To distinguish between an object and the material from which it is made To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock	To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses	To 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	To compare and group materials together, according to whether they are solids, liquids or gases	To demonstrate that dissolving, mixing and changes of state are reversible changes	To explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action of acid bicarbonate of soda
Plants						
Light	To describe the simple physical properties of a variety of everyday materials	To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses	To identify that humans and some other animals have skeletons and muscles for support, protection and movement	To 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	To explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action of acid bicarbonate of soda	To explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action of acid bicarbonate of soda
Electricity						
Forces	To compare and group together a variety of everyday materials on the basis of their simple physical properties	To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	To identify that humans and some other animals have skeletons and muscles for support, protection and movement	To 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	To explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action of acid bicarbonate of soda	To explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action of acid bicarbonate of soda
Rocks						
Sound	To compare and group together a variety of everyday materials on the basis of their simple physical properties	To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	To identify that humans and some other animals have skeletons and muscles for support, protection and movement	To 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	To explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action of acid bicarbonate of soda	To explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action of acid bicarbonate of soda
Earth and Space						
Evolution	To compare and group together a variety of everyday materials on the basis of their simple physical properties	To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	To identify that humans and some other animals have skeletons and muscles for support, protection and movement	To 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	To explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action of acid bicarbonate of soda	To explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action of acid bicarbonate of soda
Seasonal change						
	To observe changes across the four seasons		To compare and group together different kinds of rocks on the basis of their appearance and simple physical properties	To identify that part played by evaporation and condensation in the water cycle and	To know the differences in the life	To associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit To 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


St. Hugh's Catholic Primary School Progression Map

	<p>To observe and describe weather associated with seasons and how day length varies</p> <p>To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p>To identify and describe the basic structure of a variety of common flowering plants, including trees</p>	<p>To observe and describe how seeds and bulbs grow into mature plants</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</p> <p>To notice that animals, including humans, have offspring which grow into adults</p> <p>To find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</p> <p>To describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene</p>	<p>To describe in simple terms how fossils are formed when things that have lived are trapped within rock</p> <p>To recognise that soils are made from rocks and organic matter</p> <p>To recognise that they need light in order to see things and that dark is the absence of light</p> <p>To notice that light is reflected from surfaces</p> <p>To recognise that light from the sun can be dangerous and that there are ways to protect their eyes</p> <p>To recognise that shadows are formed when the light from a light source is blocked by an opaque object</p> <p>To find patterns in the way the size of shadows change</p> <p>To compare how things move on different surfaces</p> <p>To notice that some forces need contact between two objects,</p>	<p>associate the rate of evaporation with temperature</p> <p>To identify common appliances that run on electricity</p> <p>To construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p> <p>To 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</p> <p>To 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> <p>To recognise some common conductors and insulators and associate metals with being good conductors</p> <p>To identify how sounds are made, associating some of them with something vibrating</p>	<p>cycles of a mammal, an amphibian, an insect and a bird</p> <p>To describe the life process of reproduction in some plants and animals</p> <p>To describe the changes as humans, develop to old age</p> <p>To explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</p> <p>To identify the effects of air resistance, eater resistance and friction, that act between moving surfaces</p> <p>To recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect</p> <p>To describe the movement of the Earth and other planets, relative to the Sun in the solar system</p> <p>To describe the movement of the</p>	<p>To use recognised symbols when representing a simple circuit in a diagram</p> <p>To recognise that light appears to travel in straight lines</p> <p>To 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</p> <p>To 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> <p>To 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>To 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>To recognise that living things produce</p>
--	---	--	---	--	--	--

St. Hugh's Catholic Primary School Progression Map

			<p>but magnetic forces can act at a distance</p> <p>To observe how magnets, attract or repel each other and attract some materials and not others</p> <p>To 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</p> <p>To describe magnets as having two poles</p> <p>To predict whether two magnets will attract or repel each other, depending on which poles are facing</p>	<p>To recognise that vibrations from sounds travel through a medium to the ear</p> <p>To find patterns between the pitch of a sound and features of the object that produced it</p> <p>To find patterns between the volume of a sound and the strength of the vibrations that produced it</p> <p>To recognise that sounds get fainter as the distance from the sound source increases</p>	<p>Moon relative to the Earth</p> <p>To describe the Sun, Earth and Moon as approximately spherical bodies</p> <p>To use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky</p>	<p>offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p>To identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution</p>
<p>Working scientifically</p> <p>Planning and Predicting</p> <p>Greater Depth</p>	<p>To suggest what might happen</p> <p>To suggest simple ways to test ideas</p> <p>To organise a group of others to carry out an investigation/ observation</p>	<p>To suggest, with help, some ideas and questions</p> <p>To think about how to collect evidence</p> <p>To suggest what might happen</p> <p>To think about and discuss whether comparisons and tests are fair / unfair</p>	<p>To respond to suggestions</p> <p>To put forward ideas, with help, about testing</p> <p>To make predictions</p> <p>To consider, with help, what constitutes a fair test</p> <p>To plan and carry out, with help, a fair test</p>	<p>To recognise why it is important to collect data to answer questions</p> <p>To suggest questions that can be tested</p> <p>To put forward ideas about testing and make predictions</p> <p>To consider, with help, what constitutes a fair test</p>	<p>To recognise that scientific ideas are based on evidence and creative thinking</p> <p>To make predictions based on scientific knowledge</p> <p>To suggest how to collect evidence</p> <p>To select suitable equipment</p>	<p>To consider how scientists have combined evidence from observation and measurement with creative thinking to suggest new ideas and explanations for phenomena</p> <p>To make predictions based on scientific knowledge and understanding</p>

St. Hugh's Catholic Primary School Progression Map

		To choose own equipment and explain choices	To plan how to perform a task varying one factor while keeping the others the same	To decide on an appropriate approach in their own investigations to answer questions	To explain predictions in writing using scientific knowledge	To suggest methods of testing including a fair test and how to collect evidence, ensuring it is sufficient and appropriate
						To explain predictions in writing using scientific knowledge and understanding
Investigating and Observing  Greater Depth	<p>To make observations using appropriate senses</p> <p>To explore using the five senses</p> <p>To make simple comparisons and groupings</p> <p>To communicate observations orally, in drawing, labelling, simple writing and using ICT</p>	<p>To make observations and comparisons using simple equipment, following simple instructions</p> <p>To use first-hand experience and, with help, simple information sources to answer questions</p> <p>To begin to recognise when a test or comparison is fair / unfair</p>	<p>To make observations and comparisons</p> <p>To measure length, volume of liquid and time in standard measure using simple measuring equipment</p> <p>To use first-hand experience and simple information sources to answer questions</p> <p>To explain when a test or comparison is unfair</p> <p>To vary one factor while keeping the others the same when performing a test</p>	<p>To make relevant observations and comparisons</p> <p>To make measurement of temperature, time and force, as well as measurement of length</p> <p>To begin to think about why measurement of length should be repeated</p> <p>To carry out a fair test, with help, recognising and explaining why it is fair</p> <p>To explain which result should be chosen from a set of repeated results</p>	<p>To carry out a fair test, explaining why it is fair</p> <p>To understand why observations and measurement need to be repeated</p> <p>To select information from provided sources</p> <p>To use averages to gain one representative result from a set of repeated results</p>	<p>To carry out fair test identifying key factors to be considered</p> <p>To make a variety of relevant observations and measurement using simple apparatus correctly</p> <p>To decide when observations and measurements need to be checked, by repeating, to give more reliable data</p> <p>To select information from a range of sources</p> <p>To understand the difference in how to investigate quantitative and qualitative data</p>

St. Hugh's Catholic Primary School Progression Map

<p style="text-align: center;">Recording, Analysing and Evaluating</p> <p style="text-align: center;">Greater Depth</p>	<p>To communicate findings in simple ways</p> <p>To collect evidence to try and answer a question</p>	<p>To record findings in simple ways including tables, graphs</p> <p>To say whether what happened was what was expected</p>	<p>To communicate findings in a variety of ways</p> <p>To say whether what happened was what was expected and draw simple conclusions</p>	<p>To explain what the evidence shows in a scientific way and whether it supports predictions</p> <p>To suggest improvements in their work</p>	<p>To communicate findings in a variety of ways</p> <p>To identify simple trends and patterns</p>	<p>To communicate findings in tables, bar charts and line graphs, whilst making appropriate use of ICT</p>
	<p>To use charts to communicate findings</p> <p>To explain whether what happened was what they expected</p>	<p>To use comparative adjectives to explain patterns, e.g. bigger, smaller, greater, higher</p>	<p>To identify, with help, simple patterns and suggest explanations</p> <p>To lead a group to communicate findings to the rest of the class, using a variety of resources</p>	<p>To suggest improvements in their work, giving reasons</p>	<p>To communicate findings in tables, bar charts and line graphs, whilst making appropriate use of ICT</p> <p>To identify trends and patterns and offer explanations for these</p>	<p>To identify trends and results that do not appear to fit the pattern</p> <p>To provide explanations for differences in observations and measurement</p>
					<p>To draw conclusions and communicate them in appropriate scientific language</p> <p>To suggest improvements in their work, giving reasons</p>	<p>To draw conclusions and communicate them in appropriate scientific language</p> <p>To make practical suggestions for improving methods in their work giving suggestions</p>
					<p>To begin to explain anomalous data</p> <p>To draw own bar and line graphs to represent results</p>	<p>To explain anomalous data with a variety of reasons</p> <p>To show how interpretation of evidence leads to new ideas</p>