

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION



Science

Science – Early Years Foundational Knowledge – Understanding the World (The Natural World)

Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children’s personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children’s vocabulary will support later reading comprehension.

- Statutory framework for the early years foundation stage Setting the standards for learning, development and care for children from birth to five March 2021

Pupil starting points:

It is important that we make no assumptions about what pupils do or do not know on entry to our settings. The relationships we build with our pupils are fundamental to understanding and developing them as individuals with deep knowledge of their context through positive relationships with parents / carers and robust transition procedures such as home visits and baseline systems. The below is an ‘indicator’ of what we might expect our pupils to know linked to *Birth to 5 Matters* and *Development Matters* and the 2-year-old check.

In Understanding the World – Natural World (Science) pupils may have experience of: observing people and animals, talking about / singing songs about body parts, looking at themselves in a mirror, using all of their senses, exploring different materials and observing natural phenomenon e.g. rain, splashing in puddles. Some pupils may have had the opportunity to observe plants in gardens / parks. Through observation and interaction, we can find out what our children already know and can do and can use the below to build on this.

Concept	2-3 years	3-4 years	4-5 years	ELGs	KS1 Science
Plants	<ul style="list-style-type: none"> - Talk about some of the things they have observed such as plants / trees. - Notice features of plants. - Know that plants grow. - Know that plants often grow in the ground or in pots. 	<ul style="list-style-type: none"> - Know that fruit and vegetables are plants. - Know that some vegetables grow underground and they look different above and below the surface. - Understand the key features of the life cycle of a plant. - Develop an understanding of growth, decay and changes over 	<ul style="list-style-type: none"> - Name some common plants / vegetation e.g. grass, tree, bush, daisy, dandelion (and other plants and tree names local to their environment e.g. reeds / lily pads in a school pond). - Examine change over time, for example, life cycle of different plants / fruit / vegetables, growing plants from seeds, 	ELG: The Natural World Children at the expected level of development will: - <ul style="list-style-type: none"> - Explore the natural world around them, 	KS1 Science Plants: Pupils should be taught to: <ul style="list-style-type: none"> • identify and name a variety of common wild and garden plants, including deciduous and evergreen trees • identify and describe the basic structure of a

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

		<p>time. E.g. observing an apple / banana rotting / school compost heap, wet pile of leaves.</p> <ul style="list-style-type: none"> Show care and concern for living things and the environment. E.g. keep plants alive by watering them. 	<p>plants which go to seed (collect seeds).</p> <ul style="list-style-type: none"> Talk about simple plant parts and what happens to them. Use language e.g. leaves, roots, stem, petal. Talk about simple similarities and differences in plants. 	<p>making observations and drawing pictures of animals and plants;</p> <p>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;</p> <p>Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>	<ul style="list-style-type: none"> variety of common flowering plants, including trees <p>Animals Including Humans:</p> <ul style="list-style-type: none"> Pupils should be taught to: identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals identify and name a variety of common animals that are carnivores, herbivores and omnivores describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. <p>Everyday Materials</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> distinguish between an object and the material from which it is made identify and name a variety of everyday materials, including
Animals Including Humans	<ul style="list-style-type: none"> Can talk about some of the things they have observed such as people and animals. Name facial features on humans and know what they have on their bodies e.g. arms, legs, body, feet, toes, hands, fingers. Know how they are similar and different to their friends e.g. eye colour / hair colour. Name some more familiar animals e.g. farm and domestic animals. Name some human and animal excretions e.g. poo, wee, sick. 	<ul style="list-style-type: none"> Show care and concern for living things and the environment. Name obvious body parts on humans and animals. Understand the key features of the life cycle of an animal. Name some differences between animals. E.g. fur / colour / markings. Name more excretions e.g. snot, tears, blood. 	<ul style="list-style-type: none"> Talk about some similarities and differences in animals including humans. Name all basic parts of the human body that they can see and the brain and heart. Observe different animals and their body parts. Talk about why they have them e.g. beak, wings, legs. Name some habitats e.g. homes of birds (garden, forest, wood, water). Begins to talk about what their body needs e.g. Food Water Exercise, sleep. 		
Vocabulary	-	-	-		
Everyday Materials	<ul style="list-style-type: none"> Can talk about some of the things they have observed such as natural and found objects. Explore natural materials, indoors and outside. Manipulate and play with different materials e.g. dough, shaving foam, sand. 	<ul style="list-style-type: none"> Explore different materials freely, to develop their ideas about how to use them and what to make. Talk about the differences between materials and changes they notice. Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. 	<ul style="list-style-type: none"> Know about similarities and differences in materials. Sort materials using criteria such as soft, hard, flexible, plastic, wood, metal. Develop their own ideas through experimentation with a diverse range of materials. (EAD Link) Increasingly choose more appropriate materials for the job e.g. cotton reels / lids for wheels, wool for hair. (EAD Link) 		

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

			<ul style="list-style-type: none"> - Look at how materials change e.g. when cooking. 		
Seasonal Changes	<ul style="list-style-type: none"> - Observe the weather through first hand experiences. - Name simple weather types e.g. rain, snow, sun, wind. - Know the difference between hot and cold, wet and dry. 	<ul style="list-style-type: none"> - Know the difference between day and night, dark and light. - Name more weather types e.g. storm, thunder, lightning, rainbow, cloudy. - Know that we wear different clothes for different weather. 	<ul style="list-style-type: none"> - Know the names of the seasons and what the weather is / can be like in each. - Talk about the changes that each seasons brings in relation to their environment: the clothes they wear, the weather and the plants. - Describe how trees and plants change in different seasons. - Know that some animals store food for the winter. - Know that some animals hibernate in the winter. 		<p>wood, plastic, glass, metal, water, and rock describe the simple physical properties of a variety of everyday materials</p> <ul style="list-style-type: none"> • compare and group together a variety of everyday materials on the basis of their simple physical properties. <p>Seasonal Change</p> <ul style="list-style-type: none"> • Pupils should be taught to: observe changes across the four seasons • observe and describe weather associated with the seasons and how day length varies. <p>Working Scientifically</p> <p>Pupils should be taught the following skills:</p> <ul style="list-style-type: none"> • asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment • performing simple tests • identifying and classifying • using their observations and ideas to suggest answers to questions • gathering and recording data to help in answering questions.
Environmental Changes	<ul style="list-style-type: none"> - Play with small world reconstructions, building on first-hand experiences of the natural world e.g. visiting farms, walking by river or lake, visiting the seaside. - Begin to understand that places are different and have different things in them. 	<ul style="list-style-type: none"> - Begin to understand the effect their behaviour can have on the environment. - Begin to understand the need to respect and care for the natural environment and all living things. 	<ul style="list-style-type: none"> - Talks about the features of their own immediate environment and how environments might vary from one another. - Knows some ways in which humans are harming the world and how to help. 		
Forces and how things work (engineering)	<ul style="list-style-type: none"> - Repeat actions that have an effect. E.g. splashing in water, hand prints in sand, building and knocking over towers. 	<ul style="list-style-type: none"> - Explore how things work. E.g. wind-up toys, pulleys, sets of cogs with pegs and boards. - Explore and talk about different forces they can feel. 	<ul style="list-style-type: none"> - Know how to use a variety of different tools and equipment and how they work. - Know the effect of simple push and pull forces. 		
Working Scientifically / Scientific Enquiry and Discussion	<ul style="list-style-type: none"> - Use all of their senses to explore the natural world and materials. - Begin to ask simple why questions about what they see, hear, smell and hear. - Talk about what they see happening e.g. xxx got wet. 	<ul style="list-style-type: none"> - Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world. - Make observations and talk about what they see, using a wide vocabulary. 	<ul style="list-style-type: none"> - Question why things happen, having their own ideas. - Carry out observations on changes e.g. growing plants, floating and sinking, ice melting, magnets, sponges in water. 		

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION



	<ul style="list-style-type: none">- Recognise similarities and differences.	<ul style="list-style-type: none">- Ask simple why, when, what questions.- Interested in why things happen.- Describe similarities and differences.- Begin to group and sort.	<ul style="list-style-type: none">- Looks closely at similarities, differences, patterns and change.- Make observations and explain observations.- Explore the natural world around them.- Make predictions about what might happen.- Make decisions about what to do.- Describe what they see, hear and feel whilst outside.		
--	---	--	--	--	--

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

KS1 and KS2

Year Group	Wider Curriculum Focus & National Curriculum	Plants		
		Taught Knowledge	Connected Knowledge	Vocabulary
Year 1	Term 4	<ul style="list-style-type: none"> Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees. 		Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud, deciduous, evergreen
Year 2	Discrete Unit	<ul style="list-style-type: none"> Observe and describe how seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. 	<ul style="list-style-type: none"> Identify and name a variety of plants and animals in their habitats, including microhabitats. (Y2 - Living things and their habitats) 	light, shade, sun, warm, cool, water, grow, healthy, seeds, bulb, soil, nutrients
Year 3	Discrete Unit	<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. Investigate the way in which water is transported within plants. Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. 		Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal),
Year 4	N/A		<ul style="list-style-type: none"> Recognise that living things can be grouped in a variety of ways. (Y4 - Living things and their habitats) Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. (Y4 - Living things and their habitats) Recognise that environments can change and that this can sometimes pose dangers to living things. (Y4 - Living things and their habitats) 	
Year 5	N/A		<ul style="list-style-type: none"> Describe the life process of reproduction in some plants and animals. (Y5 - Living things and their habitats) 	
Year 6	N/A		<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 micro-organisms, plants and animals. (Y6 - Living things and their habitats) Give reasons for classifying plants and animals based on specific characteristics. (Y6 - Living things and their habitats) 	

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

Year Group	Wider Curriculum Focus & National Curriculum	Living Things & their Habitats		
		Taught Knowledge	Connected Knowledge	Vocabulary
Year 1	N/A		<ul style="list-style-type: none"> Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. (Y1 - Plants) Identify and describe the basic structure of a variety of common flowering plants, including trees. (Y1 - Plants) Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. (Y1 - Animals including humans) Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Y1 - Animals including humans) Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). (Y1 - Animals, including humans) Observe changes across the four seasons. (Y1 - Seasonal change) 	
Year 2	Term 5	<ul style="list-style-type: none"> Explore and compare the differences between things that are living, dead, and things that have never been alive. 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. Identify and name a variety of plants and animals in their habitats, including microhabitats. 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. 	<ul style="list-style-type: none"> Notice that animals, including humans, have offspring which grow into adults. (Y2 - Animals including humans) 	<p>Living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, habitat, adapted</p> <p>Names of local habitats e.g. pond, woodland etc.</p> <p>Names of micro-habitats e.g. under logs, in bushes etc.</p>
Year 3	N/A		<ul style="list-style-type: none"> Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. (Y3 - Plants) 	
Year 4	Term 5	<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. Recognise that environments can change and that this can sometimes pose dangers to living things. 	<ul style="list-style-type: none"> Construct and interpret a variety of food chains, identifying producers, predators and prey. (Y4 - Animals, including humans) 	<p>Classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate</p>

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION



Year Group	Wider Curriculum Focus & National Curriculum	Living Things & their Habitats		
		Taught Knowledge	Connected Knowledge	Vocabulary
Year 5	Term 5	<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. 		Life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, bulbs, cuttings, stigma, stamen
Year 6	Term 5	<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. 		Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering, non-flowering, exoskeleton

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

Year Group	WIDER CURRICULUM Focus & National Curriculum	Animals, including humans		
		Taught Knowledge	Connected Knowledge	Vocabulary
Year 1	Term 5	<ul style="list-style-type: none"> Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Identify and name a variety of common animals that are carnivores, herbivores and omnivores. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. 		Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves Names of animals experienced first-hand from each vertebrate group Parts of the body Senses – touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear, tongue
Year 2	Term 5	<ul style="list-style-type: none"> Notice that animals, including humans, have offspring which grow into adults. Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. 		Offspring, reproduction, growth, child, young/old stages (examples - chick/hen, baby/child/adult, caterpillar/butterfly), exercise, heartbeat, breathing, hygiene, germs, disease, food types (examples – meat, fish, vegetables, bread, rice, pasta)
Year 3	Term 5	<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. 		Nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, support, protect, move, skull, ribs, spine, muscles, joints
Year 4	Term 5	<ul style="list-style-type: none"> Describe the simple functions of the basic parts of the digestive system in humans. Identify the different types of teeth in humans and their simple functions. Construct and interpret a variety of food chains, identifying producers, predators and prey. 		Digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, nutrients, large intestine, rectum, anus, acid, teeth, incisor, canine, molar, premolars, herbivore, carnivore, omnivore, producer, predator, prey,

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

Year Group	WIDER CURRICULUM Focus & National Curriculum	Animals, including humans		
		Taught Knowledge	Connected Knowledge	Vocabulary
				food chain, producer, consumer
Year 5	Term 5	<ul style="list-style-type: none"> Describe the changes as humans develop to old age. 	<ul style="list-style-type: none"> <i>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. (Y5 - Living things and their habitats)</i> <i>Describe the life process of reproduction in some plants and animals. (Y5 - Living things and their habitats)</i> 	Puberty – the vocabulary to describe sexual characteristics
Year 6	Term 5	<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. 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. 	<ul style="list-style-type: none"> <i>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. (Y6 - Living things and their habitats)</i> <i>Give reasons for classifying plants and animals based on specific characteristics. (Y6 - Living things and their habitats)</i> 	Heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

Year Group	Wider Curriculum Focus & National Curriculum	Evolution & Inheritance		
		Taught Knowledge	Connected Knowledge	Vocabulary
Year 1	N/A			
Year 2	N/A		<ul style="list-style-type: none"> 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. (Y2 - Living things and their habitats) 	
Year 3	N/A		<ul style="list-style-type: none"> Describe in simple terms how fossils are formed when things that have lived are trapped within rock. (Y3 - Rocks) 	
Year 4	N/A		<ul style="list-style-type: none"> Recognise that environments can change and that this can sometimes pose dangers to living things. (Y4 - Living things and their habitats) 	
Year 5	N/A			
Year 6	Term 5	<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. 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. 		Offspring, sexual reproduction, vary, characteristics, suited, adapted, environment, inherited, species, fossils

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

Year Group	WIDER CURRICULUM Focus & National Curriculum	Seasonal Changes		
		Taught Knowledge	Connected Knowledge	Vocabulary
Year 1	Discrete Unit	<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. 		Weather (sunny, rainy, windy, snowy etc.) Seasons (winter, summer, spring, autumn) Sun, sunrise, sunset, day length
Year 2	N/A			
Year 3	N/A		<ul style="list-style-type: none"> <i>Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. (Y3 - Light)</i> 	
Year 4	N/A			
Year 5	N/A		<ul style="list-style-type: none"> <i>Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky. (Y5 - Earth and space)</i> 	
Year 6	N/A			

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

Year Group	WIDER CURRICULUM Focus & National Curriculum	Materials		
		Taught Knowledge	Connected Knowledge	Vocabulary
Year 1	Term 1	<ul style="list-style-type: none"> Distinguish between an object and the material from which it is made. Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. Describe the simple physical properties of a variety of everyday materials. Compare and group together a variety of everyday materials on the basis of their simple physical properties. 		Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through
Year 2	Term 1	<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. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. 		Names of materials – wood, metal, plastic, glass, brick, rock, paper, cardboard Properties of materials – opaque, transparent and translucent, reflective, non-reflective, flexible, rigid Shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching waterproof, absorbent,
Year 3	N/A		<ul style="list-style-type: none"> <i>Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. (Y3 - Rocks)</i> <i>Describe in simple terms how fossils are formed when things that have lived are trapped within rock. (Y3 - Rocks)</i> <i>Notice that some forces need contact between two objects, but magnetic forces can act at a distance. (Y3 - Forces and magnets)</i> 	

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

Year Group	WIDER CURRICULUM Focus & National Curriculum	Materials		
		Taught Knowledge	Connected Knowledge	Vocabulary
Year 4	Term 1	<ul style="list-style-type: none"> 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 (°C). Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. 		Solid, liquid, gas, state change, melting, freezing, melting point, boiling point, freezing point, evaporation, condensation, temperature, water cycle, particles, bonds
Year 5	Discrete Unit	<ul style="list-style-type: none"> 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. 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 solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. Give reasons, based on evidence from comparative and fair 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 that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda. 		Thermal/electrical insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, reversible/non-reversible change, burning, rusting, new material
Year 6	N/A			

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

Year Group	WIDER CURRICULUM Focus & National Curriculum	Rocks		
		Taught Knowledge	Connected Knowledge	Vocabulary
Year 1	N/A		<ul style="list-style-type: none"> Distinguish between an object and the material from which it is made. (Y1 - Everyday materials) Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. (Y1 - Everyday materials) Describe the simple physical properties of a variety of everyday materials. (Y1 - Everyday materials) Compare and group together a variety of everyday materials on the basis of their simple physical properties. (Y1 - Everyday materials) 	
Year 2	N/A		<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. (Y2 - Uses of everyday materials) 	
Year 3	Discrete Unit (links to Stone Age – Term 2)	<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. Recognise that soils are made from rocks and organic matter. 		Rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorb water, soil, fossil, marble, chalk, granite, sandstone, slate, soil, peat, basalt, limestone sandy/chalk/clay soil sedimentary, igneous, metamorphic, acid, heat, pressure, magma
Year 4	N/A			
Year 5	N/A			
Year 6	N/A		<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. (Y6 - Evolution and inheritance) 	

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

Year Group	WIDER CURRICULUM Focus & National Curriculum	Light		
		Taught Knowledge	Connected Knowledge	Vocabulary
Year 1	N/A		<ul style="list-style-type: none"> Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. (Y1 - Animals, including humans) 	
Year 2	N/A			
Year 3	Discrete Unit	<ul style="list-style-type: none"> Recognise that they need light in order to see things and that dark is the absence of light. Notice that light is reflected from surfaces. Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. Recognise that shadows are formed when the light from a light source is blocked by an opaque object. Find patterns in the way that the size of shadows change. 		Light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous, UV
Year 4	N/A			
Year 5	Term 3	<ul style="list-style-type: none"> 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. 		As for Year 3 - Light, plus straight lines, light rays
Year 6	N/A			

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

Year Group	WIDER CURRICULUM Focus & National Curriculum	Forces & Magnets		
		Taught Knowledge	Connected Knowledge	Vocabulary
Year 1	N/A			
Year 2	N/A		<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. (Y2 - Uses of everyday materials) 	
Year 3	Term 1	<ul style="list-style-type: none"> 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. 		Force, push, pull, twist, contact force, non-contact force, magnetic force, magnet, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, metal, iron, steel, poles, north pole, south pole
Year 4	N/A			
Year 5	Term 2	<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. 		Force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears
Year 6	N/A			

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

Year Group	WIDER CURRICULUM Focus & National Curriculum	Sound		
		Taught Knowledge	Connected Knowledge	Vocabulary
Year 1	N/A		<ul style="list-style-type: none"> Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. (Y1 - Animals, including humans) 	
Year 2	N/A			
Year 3	N/A			
Year 4	Term 6	<ul style="list-style-type: none"> Identify how sounds are made, associating some of them with something vibrating. Recognise that vibrations from sounds travel through a medium to the ear. Find patterns between the 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 sounds get fainter as the distance from the sound source increases. 		Sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation,
Year 5	N/A			
Year 6	N/A			

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

Year Group	WIDER CURRICULUM Focus & National Curriculum	Electricity		
		Taught Knowledge	Connected Knowledge	Vocabulary
Year 1	N/A			
Year 2	N/A			
Year 3	N/A			
Year 4	Term 3	<ul style="list-style-type: none"> 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. 		Electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, connect/connections, loose connection, short circuit, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol, generator, energy, pylon, power station, plug,
Year 5	N/A			
Year 6	Term 1	<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. 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. 		Circuit, complete circuit, circuit diagram, circuit symbol, cell, battery, bulb, buzzer, motor, switch, voltage

GLF EDUCATION TEAM

PRIMARY CURRICULUM PROGRESSION

Year Group	WIDER CURRICULUM Focus & National Curriculum	Earth & Space		
		Taught Knowledge	Connected Knowledge	Vocabulary
Year 1	N/A		<ul style="list-style-type: none"> Observe changes across the four seasons. (Y1 - Seasonal changes) Observe and describe weather associated with the seasons and how day length varies. (Y1 - Seasonal changes) 	
Year 2	N/A			
Year 3	N/A			
Year 4	N/A			
Year 5	Term 4	<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. Describe the Sun, Earth and Moon as approximately spherical bodies. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. 		Earth, Sun, Moon, (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune), spherical, solar system, rotates, star, orbit, planets
Year 6	N/A			