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EYFS Subject Content	EYFS should follow guidance set out in Development Matters 2021 (Understanding the 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, medical staff 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		
Year Group	**Autumn Term**	**Spring Term**	**Summer Term**
2Yr Nursery	**Autumn** **Ourselves** **Bonfire Night** **Diwali** **Celebrations** **Advent** **Christmas**	**Winter Weather** **Antarctica** **Jack Frost/Gruffalo's Child Stories** **Valentine's Day** **Spring** **New Life** **Easter**	**Summer Weather** **Holidays** **Growing** **Animals**
2Yr Old Nursery	Birth to 3, babies, toddlers and young children will be learning to: ○ Repeat actions that have an effect. ○ Explore materials with different properties. ○ Explore natural materials, indoors and outside. ○ Explore and respond to different natural phenomena in their setting and on trips. ○ Make connections between the features of their family and other families. ○ Notice difference between people		
Year Group	**Autumn Term**	**Spring Term**	**Summer Term**
3Yr Nursery	**Autumn** **Ourselves**	**Winter Weather** **Antarctica**	**Summer Weather** **Holidays**

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	Bonfire Night **Diwali** **Celebrations** **Advent** **Christmas**	**Jack Frost/Gruffalo's Child Stories** **Valentine's Day** **Spring** **New Life** **Easter**	**Growing** **Animals**
3 Yr Old Nursery	3/4yr old children will be learning to: ○ Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. ○ Begin to make sense of their own life-story and family's history. ○ Show interest in different occupations. ○ Explore how things work ○ Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. ○ Explore and talk about different forces they can feel. ○ Talk about the differences between materials and changes they notice. ○ Continue developing positive attitudes about the differences between people. ○ Know that there are different countries in the world and talk about the differences they have experienced or seen in photos		
Year Group	**Autumn Term**	**Spring Term**	**Summer Term**
Reception	**Seasonal Change** **Ourselves**	**Seasonal Change** **Polar Regions** **Growing and Changing**	**Seasonal Change** **Weather** **Holidays** **Transport**
Reception	Children in Reception will be learning to: ○ Talk about family members of their immediate family and community. ○ Name and describe people who are familiar to them. ○ Comment on images of familiar situations in the past.		

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	○ Compare and contrast characters from stories including figures from the past. ○ Draw information from a simple map. ○ Understand that some places are special to members of their community. ○ Recognise that people have different beliefs and celebrate special times in different ways. ○ Recognise some similarities and differences between life in this country and life in other countries. ○ Explore the natural world around them. ○ Describe what they see, hear and feel whilst outside. ○ Recognise some environments that are different from the one in which they live. ○ Understand the effect of changing seasons on the natural world around them.					
Subject content KS1	In KS1 pupils should be taught to use the following practical scientific methods, processes, and skills through the teaching of the programme of study content: ○ 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					
Year Group	**AUTUMN 1**	**AUTUMN 2**	**SPRING 1**	**SPRING 2**	**SUMMER 1**	**SUMMER 2**
Year 1	**Seasonal Change (on going)** Pupils should be taught to: ○ observe changes across the four seasons	**Animals including Humans** Pupils should be taught to: ○ identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals		**Everyday Materials** Pupils should be taught to: ○ 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		**Plants (Growing)** Pupils should be taught to: ○ identify and name a variety of common wild and garden plants,

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	○ observe and describe weather associated with the seasons and how day length varies	○ 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 Experience … Examine fish?		simple physical properties of a variety of everyday materials ○ compare and group together a variety of everyday materials based on their simple physical properties		○ including deciduous and evergreen trees ○ identify and describe the basic structure of a variety of common flowering plants, including trees Trip to the park?
Year Group	**AUTUMN 1**	**AUTUMN 2**	**SPRING 1**	**SPRING 2**	**SUMMER 1**	**SUMMER 2**
Year 2	**Living things and their habitats** Pupils should be taught to: ○ 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		**Use of everyday materials** Pupils should be taught to: identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and	**Plants (Growing conditions: seeds and bulbs)** Pupils should be taught to: ○ find out and describe how plants need water, light and a suitable temperature to grow and stay healthy ○ observe and describe how seeds and bulbs grow into mature plants		**Animals including Humans** Pupils should be taught to: ○ 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

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	○ 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.	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.		(water, food and air) ○ describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. **(Democracy, Individual liberty, Mutual respect)** Experience – zoo/safari park trip?
Subject content KS2	In KS2 pupils should be taught to use the following practical scientific methods, processes, and skills through the teaching of the programme of study content: ○ Planning different types of scientific enquiries to answer questions, including recognising, and controlling variables where necessary ○ Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate ○ Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs ○ Using test results to make predictions to set up further comparative and fair tests ○ Reporting and presenting findings from enquiries, including conclusions, causal relationships, and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations ○ Identifying scientific evidence that has been used to support or refute ideas or arguments			

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Year Group	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Year 3	**Animals including Humans** Pupils should be taught 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 ○ identify that humans and some other animals have skeletons and muscles for support, protection and movement (Democracy and Rule of Law – British Value)	**Rocks** Pupils should be taught to: ○ 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 (Rule of Law – British Value)	**Plants (How Do Plants Grow?)** Pupils should be taught to: ○ 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. (Rule of Law – British Value)		**Forces and Magnets** Pupils should be taught to: ○ 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	**Light** Pupils should be taught to: ○ 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

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					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 (Rule of Law – British Value)	size of shadows change Rule of Law – British Value)
Year Group	**AUTUMN 1**	**AUTUMN 2**	**SPRING 1**	**SPRING 2**	**SUMMER 1**	**SUMMER 2**
Year 4	**Living things and their habitats** Pupils should be taught to: ○ recognise that living things can be grouped in a variety of ways	**States of Matter (solids and liquids)** Pupils should be taught to: ○ compare and group materials together, according to whether they	**Electricity (Circuits and Conductors)** Pupils should be taught to: ○ 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		**Sound** Pupils should be taught to: ○ identify how sounds are made, associating some of them with something vibrating	**Animals including humans (Teeth & Digestion)** Pupils should be taught to: ○ describe the simple functions of the basic

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	○ 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	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	○ 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.		○ 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	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
Year Group	**AUTUMN 1**	**AUTUMN 2**	**SPRING 1**	**SRING 2**	**SUMMER 1**	**SUMMER 2**

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Year 5	**Properties and changes of materials** Pupils should be taught 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 ○ 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	**Forces** Pupils should be taught to: ○ explain that unsupported objects all 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	**Earth and space** Pupils should be taught to: ○ 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	**Animals including Humans** Pupils should be taught to: ○ describe the changes as humans develop to old age.	**Living things and their habitats** Pupils should be taught to: ○ 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. ○ Keeping Healthy

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Year Group	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Year 6	**Living things and their Habitats** Pupils should be taught to: ○ 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. **Trip to Calderstones Park to collect leaves for classification.**	**Evolution and Inheritance** Pupils should be taught 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. ○ recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.	**Light** Pupils should be taught to: ○ 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	**Electricity** Pupils should be taught to: ○ 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	**Animals including Humans** Pupils should be taught to: ○ 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 body's function. ○ describe the ways in which nutrients and water are transported within animals, including humans. **British Values** **Democracy** – Pupil voice – children to explain how human circulatory system works and how we can keep ourselves healthy. **Rule of Law** – children understand why light travels the way it does and how we see things. **Individual liberty** – children have the choice to take heed and follow the examples given to lead a healthy lifestyle or not. **Mutual Respect** – children learn to respect the choices people make irrespective of whether they feel they are correct.	

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	British Values **Democracy** – pupil voice – children to discuss why they have grouped living things into the categories they have. **Rule of Law** – children understand why classifications are used.	○ identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. **British Values** **Democracy** - Pupil Voice – children to describe their findings in relation to adaptation. **Rule of Law** – children understand how things have changed over time and why. **Individual liberty** – Mary Anning chose to continue in a male dominated field. **Mutual Respect** – men high in the field of fossil research valued the work	explain why shadows have the same shape as the objects that cast them. **British Values** **Democracy** – Pupil voice – children to explain how shadows are formed and why shadows have the same shape as the objects that cast them. **Rule of Law** – children understand why light travels the way it does and how we see things.	simple circuit in a diagram. **British Values** **Democracy** – Pupil voice – children to explain how shadows are formed and why shadows have the same shape as the objects that cast them. **Rule of Law** – children understand why light travels the way it does and how we see things.	

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		Mary Anning did (eventually)			

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		Year 1/2	Year 3/4	Year 5/6
Working Scientifically	Asking Questions	Pupils should be taught to: ○ ask simple questions and recognise that they can be answered in different ways	Pupils should be taught to: ○ ask relevant questions and use different types of scientific enquiries to answer them ○ set up simple practical enquiries, comparative and fair tests	Pupils should be taught to: ○ plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
	Measuring and recording	Pupils should be taught to: ○ observe closely, using simple equipment ○ perform simple tests ○ gather and record data to help in answering questions	Pupils should be taught to: ○ make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers ○ record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables ○ gather, record, classify and present data in a variety of ways to help in answering questions	Pupils should be taught to: ○ take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate ○ record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
	Concluding	Pupils should be taught to: ○ identify and classify ○ use their observations and ideas to suggest answers to questions	Pupils should be taught to: ○ identify differences, similarities or changes related to simple scientific ideas and processes	Pupils should be taught to: ○ identify scientific evidence that has been used to support or refute ideas or arguments

			○ report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions ○ use straightforward scientific evidence to answer questions or to support their findings	○ report and present findings from enquiries, including conclusions, causal relationships, and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
	Evaluating		Pupils should be taught to: ○ use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	Pupils should be taught to: ○ use test results to make predictions to set up further comparative and fair tests