KS/year group	Term Topic	Early Years development matters focus including working scientifically skills.	Outdoor learning
		EYFS - Acorns and Oaks	
Cycle A	Aut1: Ourselves and harvest	 Ourselves Looking at ourselves - measuring by direct comparison Comparing ourselves to others looking at similarities and differences - using comparative vocabulary e.g. Bigger, smaller. Know what makes them unique Comparing features such as hair colour, eye colour, height 	Sensory walks around school grounds to familiarise themselves to the environment
		 Harvest Harvest festival Describing special times with family and friends - ask questions about their familiar world Learning about the growth of fruit and vegetables - describing growth and change. 	 Growing fruit and vegetables in the garden area Learning what the seeds will need to grow into fruit and vegetables - sun and water Taking care of the fruit and vegetable plants - watering them
	Aut2: Autumn celebrations and Christmas	 Observe changes in the weather and the impact it has on living things e.g. Leaves falling off trees and can talk about their observations Comment and ask questions about aspects of Autumn - simple descriptions of the world around them. Simple recording through pictures 	Walk around the school grounds to observe the features of Autumn. Record/draw pictures of the signs of Autumn outdoors

	Christmas	Christmas
	 Remembers and talks about significant events in their lives (Christmas) Recognises and describes special times or events for family or friends 	Sensory walks around the school grounds to look at the main features of Winter
Sp1: Dinosaurs	 Learn about the past and how it was different to now - making comparisons Compare different features of dinosaurs - measure by direct comparison using comparative language Comment and ask questions about the world 	 Walk around school grounds to observe the world around them Comparing our world now to the past
Sp2: Growth and change and Easter	Growth and change Talk about growth and change in relation to plants and animals - sensory observations Simple descriptions of the work and asking questions Making simple guesses - what might happen? Generating a variety of ideas for testing (not always realistic/appropriate) Show care and understanding towards living things	 Observing plants and trees in the school grounds and the local area Observing growth and change at our pond area - what living things can you see? Talk about the observations of plants and animals observed
	 Easter Talks about significant events in their own experiences (Easter) Talk about and describe special times 	
Sum1: Journey to space	 Learn about the world and ask questions about it Look at similarities and differences to life in space and life on Earth - making simple 	 Comparing life in space to life in our outdoor area Observe how we can move around on the ground compared to astronauts in space

		 comparatives Be able to give simple descriptions of the world 	
	Sum2: Traditional tales	 Choosing favourite stories and learn that other children don't always enjoy the same things Researching: Looking at objects and pictures and discussing what they can see. Simple guess - what might happen? Making comparisons Look at similarities and differences between themselves and book characters 	 Using the outdoor area to create scenes to reenact scenes from our stories. Looking at the outdoor environments in the stories and looking for similarities and differences to out outdoor environment.
Cycle B	Aut1: Myself and my	Myself & My Family	Ourselves
	family	 Looking at ourselves - measuring by direct comparison Comparing ourselves to others looking at similarities and differences - using comparative vocabulary e.g. Bigger, smaller. Comparing features such as hair colour, eye colour, height Knows some of the things that make them unique, and can talk about some of the similarities and differences in relation to friends or family. Asks questions about aspects of their familiar world. 	Sensory walks around school grounds to familiarise themselves to the environment

Aut2: Favourite	Harvest	Harvest
stories and harvest/Christmas	 Harvest festival Describing special times with family and friends – ask questions about their familiar world 	 Growing fruit and vegetables in the garden area Learning what the seeds will need to grow into fruit and vegetables - sun and water Taking care of the fruit and vegetable plants - watering them
	 Christmas Remembers and talks about significant events in their lives (Christmas) 	Christmas
	 Recognises and describes special times or events for family or friends Talking about objects and events. Simple recording - pictures/images. Asks questions about aspects of their familiar world. 	Sensory walks around the school grounds to look at the main features of Winter
Sp1: Winter	 Comparing seasons, clothing, weather etc. General sensory observations of animals and plants. Describing the world around them. Asks questions about aspects of their familiar world. Guessing what might happen? Can talk about some of the things they have observed such as plants, animals, natural and found objects. Developing an understanding of growth, decay and changes over time Shows care and concern for living things and the environment. 	 Looking for signs of winter. Comparing seasons. Looking at different types of trees. Comparing clothes for winter/summer. Animals hibernating.

Sp2: People who help us	 Looking at different people from the community - Shows interest in different occupations and ways of life. Keeping healthy - healthy eating / healthy bones. Talk about the effect of exercise on our body. Describe the world around them. Asks questions about aspects of their familiar world. Measure by direct comparison. 	 Sensory walks around school grounds to familiarise themselves to the environment. Growing fruit and vegetables in the garden area. Learning what the seeds will need to grow into fruit and vegetables - sun and water. Taking care of the fruit and vegetable plants - watering them.
Sum1: Mini beasts	 General sensory observations of animals and plants. Discussing life cycles. Asks questions about aspects of their familiar world. Measuring by direct comparison. Talking about some of the things they have observed such as plants, animals, natural and found objects. 	 Observing the outdoor around them. Discussing habitats. Creating minibeast areas, bug hotels. Pond dipping. Life cycles of frogs, caterpillars.
Sum2: Beaches and holidays (?)	 Simple descriptions of the world around them. Asks questions about aspects of their familiar world. Talking about some of the things they have observed such as plants, animals, natural and found objects. Developing an understanding of growth, decay and changes over time. Shows care and concern for living things and the environment. 	 Looking for signs of summer. Comparing seasons. Looking at different types of trees. Planting flowers.

	KS1 - Elm and Beech				
K5/year	Term Topic	National Curriculum focus including	Outdoor learning (FS) opportunities		
group		working scientifically skills.			
Cycle A	Aut1: Castles (History)	 Year 1: Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. Compare and group together a variety of everyday materials on the basis of their simple physical properties. Year 2: Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. 	 Year 1: Looking in and around the school, gathering data on materials present. Completing small tests on different materials. Year 2: Looking in and around the school, gathering data on materials present. Completing small tests on different materials. 		
	Aut2: Me, Myself and I(Science and History)	 Year 1: Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Year 2: 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 	 Year 1: Sensory walks around the school thinking and gathering data about their own senses. Year 2: Investigation what is needed for survival. 		

	types of food, and hygiene.	
Sp1: Our cool world (Geography and science)	 Year 1: Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies. Describe and compare the structure of a variety of common animals Year 2: 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. 	 Year 1: Observations of own weather. Collecting data of weather and day length. Year 2: Use observational skills to identify and name a variety of animals and compare them.
Sp2: Our green world (Geography and science)	 Year 1: 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. 	 Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. (use observations to answer questions) Year 2: Observe and describe how seeds and bulbs grow into mature plants (gather and record data to help answer questions)

	 Year 2: 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. Identify and name a variety of plants and animals in their habitats, including microhabitats.	
Sum1: Dinosaurs (History)	 Year 1: 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. Year 2: Explore and compare the differences between things that are living, dead, and things that have never been alive. 	
Sum2: Toys (History)	 Year 1: Describe the simple physical properties of a variety of everyday materials. Distinguish between an object and the material from which it is made. Year 2: Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and 	 Year 1: Looking in and around the school, gathering data on materials present. Completing small tests on different materials. Year 2: Looking in and around the school, gathering data on materials present. Completing small tests on different materials.

cardboard for particular uses. • Investigate how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	
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<u>Cycle B</u>	Aut1: Fantastic farming (Science)	 Year 1: Identify and describe the basic structure of a variety of common flowering plants, including trees. Observe (closely) changes across the four seasons Observe and describe weather associated with the seasons and how day length varies Year 2: Observe and describe how seeds and bulbs grow into mature plants (use observations to answer questions) Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy (gather and record data) Gather and record data) Observe and describe how plants need water and stay healthy (gather and record data)	 Year 1: Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. (classify) Year 2: Identify that most 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 (classify) Identify and name a variety of plants and animals in their habitats, including micro- organisms. (classify / use observations to answer questions)
	Aut2: What are things made of? (Science)	 <u>Vear 1:</u> Distinguish between an object and the material for which it is made Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock (classify) Describe the simple physical properties of a variety of everyday materials (use observations to answer questions) Compare and group together a variety of everyday materials on the basis of their simple 	 Year 1: Identify and name a variety of common animals including fish, amphibians (classify) Describe and compare the structure of a variety of common animals (fish, amphibians) (use observations to answer questions)

	physical properties. (classify) Year 2: Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. (classify) Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. (ask simple questions / perform simple tests)	Y <u>ear 2:</u> 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 (use observations to answer questions)
Sp1:Travellers tales (Geography and history)	 Year 1: Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. (use observations to answer questions) 	 Year 1: Observe changes across the four seasons (use observations to answer questions) Observe and describe weather associated with the seasons and how day length varies (gather and record data to help answer questions)
	 Year 2: Notice that animals, including humans, have offspring which grow into adults. (ask simple questions) Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) (gather and record data to help answer questions) 	Year 2: Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. (observe closely, using special equipment)
Sp2: Land Ahoy (Geography)	 Year 1: Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. (classify) 	Year 1: Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. (use observations to answer questions)

	 Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) (use observations to answer questions) Year 2: Explore and compare the differences between things that are living, dead and things that have never been alive (ask simple questions) 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 (use observations to answer questions) 	Year 2: • Observe and describe how seeds and bulbs grow into mature plants (gather and record data to help answer questions)
Science)	 Year 1: Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. (classify) Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) (use observations to answer questions) Year 2: Identify that most 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 (gather and record data to help answer questions) 	Year 1: Observe changes across the four seasons (use observations to answer questions) Observe and describe weather associated with the seasons and how day length varies (gather and record data to help answer questions) Year 2: Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. (observe closely, using special equipment)

	 Identify and name a variety of plants and animals in their habitats, including micro- organisms. (observe closely, using special equipment) 	
Sum2: Brilliant Britain (History and Geography)	 Year 1: Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (classify) Year 2: Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) (ask simple questions) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. (gather and record data to help answer questions) 	 Year 1: Identify and name a variety of common animals including fish, amphibians (classify) Describe and compare the structure of a variety of common animals (fish, amphibians) (use observations to answer questions) Year 2: Observe and describe how seeds and bulbs grow into mature plants (gather and record data to help answer questions)

	KS2 - Chestnut and Willow		
KS/year group	Term Topic	National Curriculum focus including working scientifically skills.	Outdoor learning (FS) opportunities
<u>Cycle A</u>	Aut1: courageous castles (History)	 Year 3: 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. 	 Year 3: Recognise that soils are made from rocks and organic matter. Year 4: Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. Pond dipping (setting up simple practical enquiries, comparative and fair tests. Recording findings.)
	Aut2: Feel the force (Science)	 Year 3: 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. 	Year 3: Compare how things move on different surfaces To recognise what forces are acting in the forest.

Sp1: Our cool world (Geography and science)	world (Geography • Recognise that living things can be grouped in a	 Year 3: Identify that animals need the right types and amount of nutrition and that they cannot make their own food; they need nutrition from what they eat. Year 4: Construct and interpret a variety of food chains, identifying producers, predators and prey. Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens
Sp2: Green granger (Geography and science)	 in degrees Celsius (oC) Year 3: 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. Year 4 	Year 4: Construct and interpret a variety of food chains, identifying producers, predators and prey.

		 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 	
wo	um1: Out of this orld (Science and story)	 Year 3: 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. 	 Year 3: 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 Year 4: Recognise that environments can change and that this can sometimes pose dangers to living things (asking and answering questions and making careful observations)
Ro	um2: Journey's otten Romans History)	materials	 Year 3: Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. (asking and answering questions and making careful observations) Year 4: Recognise that environments can change and that this can sometimes pose dangers to living things

Cycle B	Aut1: Savage Stone Age (History)	 Classify by comparing and grouping together different kinds of rocks on the basis of their appearance and simple physical properties. Identify differences and similarities of the types of rocks and present findings through labelled sketches. Describe, in simple terms, changes related to the process of fossilisation and how fossils are formed when things that have lived are trapped within rock (set up simple practical enquiries and report on findings using scientific language and labelled diagrams). Recognise that soils are made from rocks and organic matter. 	Explore different types of soils and rocks in our environment (asking and answering questions and making careful observations). Carefully observe, like an archaeologist, gather and record what has been found in the ground and make sketches of what has been dug up, presenting the findings both verbally and written.
	Aut2: Mega Structures (Geography and history)	 Year 4 (and 3) Identify common appliances that run on electricity (observing, recording and ask and answer questions). 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 	Make observations in school, finding sources of electricity and appliances that need electricity. Create own recording sheet.

		 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 (set up simple comparative and fair tests). 	
Tales Maya	s Mysterious	 Year 3 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 sources of food (nutrition) in the outdoor areas using observation and recording skills.
water	r world graphy and nce)	 Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature (ask and answer questions using observations and enquiry to help answer) Compare and group materials together, according to whether they are solids, liquids or gases 	Explore outside spaces making observations for signs of water collection, puddles, drainage and ground runoff. Record data onto a map. River trip - (geography fieldwork) Make systematic and careful observations taking accurate measurements using standard units, using a range of equipment in the field. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables as required.

Sum1: Inside and out living things (Science)	 Year 3 Identify that humans and some other animals have skeletons and muscles for support, protection and movement (ask and answer questions reporting the findings in a written form of presentation). 	Using the outdoor space to exercise and test out the use of our muscles setting up simple enquiries and recording the data. Drawing conclusions from the findings.
	 Vear 4 Describe the simple functions of the basic parts of the digestive system in humans (ask and answer questions reporting the findings in a written form of presentation). Identify the different types of teeth in humans and their simple functions (make careful observations and present as a poster or other pictorial way). 	
Sum2: What's in the news?	 Year 4: 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 feature of the object that produced it Find patterns between the volume of a sound and the strength of the vibrations that produced it (comparing) 	Pollinating in the outdoor areas (plants - year 3) identification using observations

	 Recognise that sounds get fainter as the distance from the sound source increases 	