

			EYFS Framework/ National Curriculum	
		EYFS	Year 1	Year 2
	Substantive knowledge	<ul> <li>I can use all my senses in hands-on exploration of natural materials (Three and Four-Year-Olds)</li> <li>I begin to understand the need to respect and care for the natural environment and all living things (Three and Four-Year-Olds).</li> <li>I can plant seeds and care for growing plants. (Three and Four-Year-Olds)</li> <li>I understand the key features of the life cycle of a plant. (Three and Four-Year-Olds)</li> <li>Explore the natural world around them, making observations and drawing pictures of animals and plants. (ELG)</li> </ul>	<ul> <li>I know the names of a variety of common wild and garden plants, including deciduous and evergreen trees.</li> <li>I can Identify basic structure of a variety of common flowering plants, including trees.</li> </ul> Revisit: previous learning on plants	<ul> <li>I can observe and describe how seeds and bulbs grow into mature plants.</li> <li>I can find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</li> <li>Revisit: the names of common, wild and garden plants, names of deciduous/ evergreen trees. Different parts of a small plant and a tree</li> </ul>
	Disciplinary knowledge	I can show curiosity and ask questions I can make observations and take measurements by comparison I can identify, sort and group I can test ideas I can use my observations to help to answer questions I can record observations	<ul> <li>I can observe closely, using simple equipment such as magnifiers</li> <li>I can identify and classify using swatch books</li> </ul>	<ul> <li>I can observe closely, using simple equipment such as magnifiers</li> <li>I can use observations and ideas to suggest answers to questions.</li> <li>I can gather and record data to help in answering questions.</li> <li>I can perform a simple test.</li> </ul>
Plants	Vocabulary	Seed, grow, leaf, flower, stem	Daffodil, tulip, crocus, daisy, buttercup, dandelion, clover, ivy, brambles, deciduous, evergreen, oak, rowan, silver birch, Medlar, pine, laurel, cherry, field maple, hawthorn, ash, bamboo, hornbeam, alder  Trunk, branches, twigs, leaves, flowers, blossom, petals, fruit, stem, roots, bulb, seeds	Sprout, germinate, shoot, root, grow, germination, Root hairs, seedling, light, warmth, water, fair test
	Scientific Enquiry	<ul> <li>Autumn 2: Enquiry 1: Pupils to plant daffodils and observe their growth throughout the Autumn and winter,</li> <li>Spring 2, Enquiry 2: Pupils to grow sunflower seeds and observe the growth and look after them, then plant them in the allotment.</li> <li>Spring 2: Enquiry 3: Pupils to learn to care for growing plants</li> <li>Spring 2, Enquiry 4: Pupils to learn about the lifecycle of the sunflower. (Recorded)</li> <li>Spring 2, Enquiry 5: pupils to draw the picture of a small flowering plant and label it. (recorded)</li> <li>Forest School throughout the year: Pupils to explore the field and woodland area of the school and talk about what they see/ hear/smell and feel in the great outdoors. Pupils to learn to respect and care for the natural environment by taking part in litter picking activities.</li> </ul>	<ul> <li>Grouping and classifying things</li> <li>Autumn 2: Enquiry 1: Pupils to identify and name a variety of deciduous and evergreen trees on the school's grounds.</li> <li>Summer 1 Enquiry 2: Pupils to Draw a daffodil and label different parts.</li> <li>Summer 1: Enquiry 3: Pupils to identify and name a variety of small common wild and garden plants growing in the school field/allotment using plant identification resources.</li> <li>Summer 1: Enquiry 4: Pupils to Identify and name a variety of deciduous and evergreen trees growing in our field/woodland using tree identification resources.</li> <li>Summer 1, Enquiry 5: Pupils to Draw a tree and label different parts.         Pattern Seeking     </li> <li>Summer 1, Enquiry 6: Children to go for a walk on the field and investigate if there is a pattern to where daisies grow on our field</li> </ul>	<ul> <li>Observing changes over a period of time</li> <li>Autumn 2, Enquiry 1: pupils to Plant bulbs in Autumn and observe and record different stages of their growth throughout the season by drawing/taking photographs. (Recorded)</li> <li>Summer 1, Enquiry 2: Pupils to plant broad beans seeds and observe the growth over the time by keeping a diary. (Recorded)</li> <li>Carrying out simple comparative tests</li> <li>Summer 1 Enquiry 3: Pupils to set up a series of simple fair test in order to find out what the best conditions are for the cress seeds to germinate. (One pot in the dark, one in the light) (one in the cold, one in the warmth) pupils to write up their investigation. (Recorded)</li> </ul>



		EYFS	Year 1	Year 2
Animals including humans	Substantive knowledge	<ul> <li>I understand the key features of the life cycle of an animal. (Three and Four-Year-Olds)</li> <li>I begin to understand the need to respect and care for the natural environment and all living things. (Three and Four-Year-Olds)</li> <li>I can make healthy choices about food, drink, activity and toothbrushing (Three and Four-Year-Olds)</li> <li>I Know and can talk about the different factors that support my overall health and wellbeing such as regular physical activity, sensible amounts of 'screen time' healthy eating, having a good sleep routine, toothbrushing, being a safe pedestrian (Reception)</li> <li>Explore the natural world around them, making observations and drawing pictures of animals and plants (ELG)</li> </ul>	<ul> <li>I can identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</li> <li>I can identify and name a variety of common animals that are carnivores, herbivores and omnivores.</li> <li>I can describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</li> <li>I can identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</li> <li>Revisit: Basic body parts, senses, minibeasts (names, lifecycle of butterfly)</li> </ul>	<ul> <li>I notice that animals, including humans, have offspring which grow into adults.</li> <li>I can find out about and describe the basic needs of animals, including humans, for survival (water, food and air).</li> <li>I can describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</li> <li>Revisit: basic structure of different animals (5 groups) their similarities and differences, human body parts and senses, healthy living, carnivores, herbivores and omnivores.</li> </ul>
	Disciplinary knowledge	<ul> <li>I can show curiosity and ask questions</li> <li>I can make observations and take measurements by comparison</li> <li>I can identify, sort and group</li> <li>I can test ideas</li> <li>I can use my observations to help to answer questions</li> <li>I can record observations</li> </ul>	<ul> <li>I can ask simple questions and recognise that they can be answered in different ways.</li> <li>I can Use my observations and ideas to suggest answers to questions.</li> <li>I can perform simple tests</li> </ul>	<ul> <li>I can ask simple questions and recognise that they can be answered in different ways.</li> <li>I can identify and classify</li> <li>I can gather and record data to help in answering questions</li> </ul>
	Vocabulary	Life cycle, Egg, Chick, bird, caterpillar, cocoon, chrysalis, butterfly, nocturnal, diurnal, human, humans' body parts (Legs, arm, head, body) 3 senses and associated body parts, Names of a range of wild animals including nocturnal animals, pets, mini beasts, names of a few common British garden birds (Blue Tit, Black Bird, Pigeon, Robin, Red Kite)	Human body parts including reproductive parts (penis, testicles, vulva, breasts), 5 senses and the associated parts Invertebrates, Names of a few Insects, Arachnids and Molluscs, Vertebrates, Backbone, Mammals, Names of a few local mammals including humans, Fish, name of a few common fish, Birds, Names of a few local birds, Reptiles, names of a few reptiles, Amphibians, Names of a few local amphibians, Carnivores, Herbivores, Omnivores	Offspring, live young, egg, tadpole, chick, lifecycle, Growth, Survive, Water, Food, Air, Shelter, Balanced diet, Healthy, Exercise, Hygiene
	Scientific Enquiry	Autumn 1: Enquiry 1: Pupils to learn to recognise and learn the name the basic body parts.  Autumn 1: Enquiry 2: Pupils to go for a walk on the school grounds and name the senses they are using and the associated body parts. (Recorded)  Autumn 2: Enquiry 3: Pupils to learn about nocturnal animals and their behaviour and sort a range of animals into nocturnal and diurnal animals. (recorded)  Autumn 2: Enquiry 4: Pupils to learn about hedgehogs (lifecycle, habitat, survival needs)  Autumn 2: Enquiry 5: Pupils to learn about tawny owls (habitat, survival needs and lifecycle)  Spring 1: Enquiry 6: Pupils to learn the name of a few common British garden birds and take part in the RSPB big garden bird watch.  Spring 1: Enquiry 7: Pupils to learn to respect and care for the natural environment and all living things by making bird feeders.  Spring 1: Enquiry 8: Pupils to learn about healthy and unhealthy food. They are to learn the name of common fruit and vegetables, make vegetable soup and fruit smoothies. Pupils to sort healthy and unhealthy food (Recorded)	Autumn 1: Enquiry 1: Pupils to identify, name, draw and label the body parts.  Autumn 1: Enquiry 2: Pupils to explore their sense of sight: Bucket, and beanbag experiment  Autumn 1: Enquiry 3: Sound: A sound walk around the grounds, musical instruments experiment  Autumn 1: Enquiry 4: Pupils to explore their sense of Taste: a sample of food for children to taste five basic tastes — sweet, salty, sour, bitter and savoury.  Autumn 1: Enquiry 5: Pupils to explore their sense of touch: feely bag and a selection of objects.  Autumn 1: Enquiry 6: Pupils to explore their sense of Smell: 5 strong smelly items in opaque jars.  Spring 1: Enquiry 1: Pupils to identify and name a variety of common mammals  Spring 1: Enquiry 2: Pupils to draw and describe the structure of a fish Spring 1: Enquiry 3: Pupils to draw and describe the structure of an amphibian  Spring 1: Enquiry 4: Pupils to draw and describe the structure of a	Autumn 1: Enquiry 1: what mammals need to survive: pupils to group images, or small figures of mammals, based on different categories such as: dietary requirements, whether they inhabit land or sea, or where they would find shelter.  Autumn 1: Enquiry 2: what birds need to survive: pupils to group images, or small figures of birds, based on different categories such as: dietary requirements, whether they inhabit on land or near sea, or where they would make nests.  Autumn 1: Enquiry 3: Pupils to learn what fish need to survive, use large hoops to sort and group images, or small figures, of fish, birds and mammals based on their needs for survival.  Autumn 1: Enquiry 4: Pupils to learn what amphibians need to survive: pupils to create a mini pond for an amphibian.  Autumn 1: Enquiry 5: Pupils to learn what reptiles need to survive.  Pupils to sort and group images, or small figures of amphibians, fish, birds, mammals and reptiles based on their needs for survival.  Autumn 1: Enquiry 6: Pupils to learn what humans need to survive Autumn 1: Enquiry 7: food; Pupils to learn about the food groups and create a healthy plate

reptile



Spring 1: Enquiry 9: Pupils to learn about the importance of keeping	Spring 1: Enquiry 5: Pupils to draw and describe the structure of a bird	Autumn 1: Enquiry 8: hygiene, pupils to learn how to keep clean.
clean, brushing teeth and doing exercise.	Spring 1: Enquiry 6: Pupils to draw and describe the structure of a	Pupils to do an investigation how germs spread via dirty hands using
Summer 1: Enquiry 10: Pupils to learn the life cycle of a butterfly.	mammal	dry herbs.
(recorded)	Spring 1: Enquiry 7: Pupils to identify and sort a variety of common	Autumn 1: Enquiry 9: teeth, Pupils to learn how to maintain good oral
Summer 1: Enquiry 11: Pupils to go on a minibeast hunt on the grounds.	animals based on what they eat. (Venn diagram, recorded)	hygiene and explain why it is important.
Summer 1: Enquiry 12: Pupils learn to name a few common mini beasts	Pattern seeking	Pattern seeking
and sort them into groups based on basic characteristics (Number of	Autumn 1: Enquiry 7: what is the most common eye colour in our class?	Autumn1: Enquiry 10: exercise (which exercise makes our heart beat
legs, wings/no wings) (Recorded)	(Recorded)	faster?) (Recorded in a table)
Summer 2: Enquiry 13: Pupils to learn about fish, birds, mammals and	finding things out using secondary sources of information	Grouping and classifying things
their basic characteristics and lifecycles.  Summer 2: Enquiry 14: Pupils to sort a group of fish, birds and mammals into groups (Recorded)  Summer 2: Enquiry 15: Pupils to learn about foxes (lifecycle, habitat, survival needs)  Summer 2: Enquiry 16: Pupils to learn about badgers (lifecycle, habitat, survival needs)	Spring 1: Enquiry 8: What do the bears eat?	Summer 2: Enquiry 1: Mother and offspring Summer 2: Enquiry 2: Life cycle of mammals including humans Summer 2: Enquiry 3: Life cycle of birds Summer 2: Enquiry 4: Lifecycle of amphibians Summer 2: Enquiry 5: Lifecycle of reptiles Summer 2: Enquiry 6: Lifecycle of fish

		EYFS	Year 1	Year 2
(Use) Everyday materials	Substantive knowledge Disciplinary knowledge	<ul> <li>I can use all my senses in hands-on exploration of natural materials. (Three and Four-Year-Olds)</li> <li>I can explore collections of materials with similar and/or different properties. (Three and Four-Year-Olds)</li> <li>I can talk about the differences between materials and changes I notice. (Three and Four-Year-Olds)</li> <li>I can explore and talk about different forces I can feel (Three and Four-Year-Olds)</li> <li>I understand some important processes and changes in the natural world around me, including changing states of matter (ELG)</li> <li>I can show curiosity and ask questions</li> <li>I can make observations and take measurements by comparison</li> <li>I can identify, sort and group</li> <li>I can use my observations to help to answer questions</li> </ul>	<ul> <li>I can distinguish between an object and the material from which it is made.</li> <li>I can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</li> <li>I can describe the simple physical properties of a variety of everyday materials.</li> <li>I can compare and group together a variety of everyday materials on the basis of their simple physical properties.</li> <li>Revisit: vocabulary to describe the physical properties of different objects e.g. hard, soft, smooth, rough, heavy</li> <li>I can identify and classify</li> <li>I can observe closely using simple equipment</li> <li>I can perform simple tests</li> </ul>	<ul> <li>I can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</li> <li>I can find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li> <li>Revisit: a variety of everyday materials, including wood, plastic, glass, metal, water, and rock and describe physical properties</li> <li>I can identify and classify</li> <li>I can perform simple tests</li> <li>I can ask simple questions and recognise that they can be answered in different ways.</li> <li>I can Use my observations and ideas to suggest answers to questions.</li> </ul>
_	Vocabulary	I can record observations  Basic words describing different materials e.g. Hard, soft, smooth, rough, heavy etc.	Objects, materials, natural, man-made, Vocabulary describing the materials (absorbent, water proof, bendy, Rough, shiny, smooth, Soft, stiff, stretchy, dull, flexible, heavy, rigid, light, solid, liquid), different types of martials (wood, plastic, glass, metal, water, rock)	squashing, hardness, strength, bending, twisting, stretching, transparent, translucent, opaque
		Forest School throughout the year: Pupils to explore the school grounds	Grouping and classifying things	Grouping and classifying things
	Scientific Enquiry	throughout the year and use their senses to explore the natural objects in nature such as leaves, trees, twigs, rocks, etc. and use basic vocabulary to describe the objects. Pupils to learn about natural and man-made objects.	Autumn 2: Enquiry 1: pupils to explore a selection of objects made with different materials (wood, plastic, glass and metal) and sort them based on their properties.  Autumn 2: Enquiry 2: pupils to explore rocks, go on a rock hunt and sort	Autumn 2: Enquiry 1: Explore materials, Pupils to go on a material hunt to identify and sort and group based on different categories.  Autumn 2: Enquiry 2: wood, paper and cardboard. Pupils carry out simple tests on wood, paper and cardboard to learn more about their
		Child Initiated Learning throughout the year: Pupils to explore collections of materials available in their learning environment during	them based on their physical properties (hard, heavy, light, rough, smooth)	physical properties.  Autumn 2: Enquiry 3: brick and rock. Pupils to observe, draw and label buildings or structures made from brick or stone.



		the child-initiated times and talk about the differences and use basic vocabulary to describe their properties.  Spring 1: Enquiry 1: Pupils to learn about the changing states of matter by melting chocolate in a Bain Marie pot and changing it to solid in the fridge.  Spring 1: Enquiry 2: Pupils to learn about the changing states of matter by freezing water and melting ice.  Spring 1: Enquiry 3: Pupils to explore the effect of heat on food by toasting bread in a toaster and talk about the changes.  Spring 1: Enquiry 4: Pupils to explore collections of materials with similar and/or different properties and sort them based on their basic properties. (Recorded)  Spring 1: Enquiry 5: Pupils to explore different light sources and learn how shadows are made.	Autumn 2: Enquiry 3: Pupils to distinguish between materials and objects. Pupils to go on a material hunt around the classroom and sort the objects based on the material.  Autumn 2: Enquiry 4: Pupils to experiment with Floating or sinking and perform a simple test to find out what floats and what sinks.  Carrying out simple comparative tests  Autumn 2: Enquiry 5: which material is the best at absorbing water?  Pupils to carry out a simple investigation to explore which materials are able to absorb water.  Pattern seeking  Autumn 2: Is there a pattern in the types of materials that are used to make objects in a school?	Autumn 2: Enquiry 4: glass and plastic. Pupils to perform tests on glass and plastic to further understand their properties and learn about the suitability of the materials for different uses.  Autumn 2: Enquiry 5: metal. Pupils to observe a range of metallic objects, sort and compare the objects in different ways and learn about the suitability of the materials for different uses.  Autumn 2: Enquiry 6: fabric, pupils to perform simple tests to choose the best fabric for a particular purpose. Such as Materials for a PE kit Autumn 2: Enquiry 7: same object, different material Autumn 2: Enquiry 8: Test materials (bend, squash, twist and stretch) pupils to test materials to see if they change shape through bending, squashing, twisting and stretching.  Carrying out simple comparative tests  Autumn 2: Enquiry 1: waterproof experiment (Which material would be the best for an umbrella? (Recorded) (CREST)  Autumn 2: Enquiry 2: What is the best material for the tea bag? (Recorded) (CREST)  finding things out using secondary sources of information  Autumn 2: Where does glass come from and when did we start using it?
		EYFS	Year 1	Year 2
Seasonal	Substantive knowledge	<ul> <li>I can explore the natural world around me. (Reception)</li> <li>I can describe what I see, hear and feel whilst outside. (Reception)</li> <li>I understand the effect of changing seasons on the natural world around me. (Reception)</li> <li>I understand some important processes and changes in the</li> </ul>	<ul> <li>I can observe changes across the four seasons.</li> <li>I can observe and describe weather associated with the seasons and how day length varies.</li> </ul> Revisit: seasons and seasonal changes	
	Disciplinary knowledge	natural world around me, including the seasons (ELG)  I can show curiosity and ask questions  I can make observations and take measurements by comparison  I can identify, sort and group  I can test ideas  I can use my observations to help to answer questions  I can record observations	<ul> <li>I can ask simple questions and recognise that they can be answered in different ways.</li> <li>I can gather and record data to help in answering questions.</li> </ul>	
	Vocabulary	Seasons, autumn, winter, spring, summer, weather and weather vocabulary.	Season Autumn, Winter, Spring, Summer Weather, Temperature, Sunny, Windy Breezy, Cloudy Stormy, Rainy Snowy, foggy, Thunderstorm, Rainbow, Showers Dry, wet, Hot Cold, Chilly, Frost Ice, freezing	
	Scientific Enquiry	Forest School throughout the year: Pupils to explore the school grounds throughout the year and observe the changes in the natural world around them including the seasons. Pupils to learn about different weather and the basic vocabulary related to the weather.	Observing changes over time  Autumn 2: Enquiry 1: pupils to learn about Changes in Autumn  Spring 1: Enquiry 2: pupils to learn about Changes in winter  Summer 1: Enquiry 3: pupils to learn about Changes in Spring  Summer 2: Enquiry 4: Pupils to learn about changes in Summer  Pattern seeking  Throughout the Year: Which month has the most rain in the UK? Pupils to collect the amount of rain in a rain gauge and record data in a table throughout the year. (Recorded)  Throughout the Year: Which month is the coldest month? Pupils to read the temperature of the outside thermometer and record on the classroom chart. (Recorded)	



		EYFS	Year 1	Year 2
Living things and their habitats	Substantive knowledge	<ul> <li>I can use all my senses in hands-on exploration of natural materials. (Three and Four-Year-Olds)</li> <li>I begin to understand the need to respect and care for the natural environment and all living things. (Three and Four-Year-Olds)</li> <li>I can draw information from a simple map. (Reception)</li> <li>I can explore the natural world around me. (Reception)</li> <li>I can describe what I see, hear and feel whilst outside. (Reception)</li> <li>I can recognise some environments that are different to the one in which I live. (Reception)</li> <li>I can explore the natural world around me, making observations and drawing pictures of animals and plants. (ELG)         <ul> <li>I know some similarities and differences between the natural world around me and contrasting environments, drawing on my experiences and what has been read in class (ELG)</li> </ul> </li> </ul>		<ul> <li>I can explore and compare the differences between things that are living, dead, and things that have never been alive.</li> <li>I can 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.</li> <li>I can identify and name a variety of plants and animals in their habitats, including microhabitats.</li> <li>I can 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.</li> </ul>
	Disciplinary knowledge	<ul> <li>I can show curiosity and ask questions</li> <li>I can make observations and take measurements by comparison</li> <li>I can identify, sort and group</li> <li>I can test ideas</li> <li>I can use my observations to help to answer questions</li> <li>I can record observations</li> </ul>		<ul> <li>I can identify and classify</li> <li>I can perform simple tests</li> <li>I can ask simple questions and recognise that they can be answered in different ways.</li> <li>I can Use my observations and ideas to suggest answers to questions.</li> </ul>
	Vocabulary	Habitat, water, food, shelter		Living, Dead, Alive, Extinct, micro habitat, Adapted, food chain, producer, prey, predator, consumer, habitat
	Scientific Enquiry	Forest School throughout the year: Pupils to explore the school grounds throughout the year, making observations of all the living things and describe what they see/feel and hear. Pupils to make habitats for their favourite mini beast.  Child Initiated Learning throughout the year: Pupils to listen to the stories and non-fiction books and learn some similarities and differences between the natural world around them and contrasting environments.  Summer 2, Enquiry 1: Pupils to learn about the characteristics of some contrasting habitats (polar, desert, ocean) and match the habitats with their animals living there. (Recorded)		Spring 1: Enquiry 1: habitats in my local habitats Spring 1: Enquiry 2: Polar habitats Spring 1: Enquiry 3: Desert habitats Spring 1: Enquiry 4: Ocean habitats Spring 1: Enquiry 5: Forest habitats Spring 1: Enquiry 6: Microhabitats Spring 1: Enquiry 7: Habitats and diet Spring 1: Enquiry 8: Food chains Spring 1: Enquiry 9: Living, dead or never alive  pattern seeking  Spring 1: Enquiry 10: What conditions do woodlice prefer to live in?