



# Science

YR-3 progression

	Reception	Year 1	Year 2	Year 3
<b>Seasons and Weather</b>				
<b>Substantive Knowledge</b>	<p><b>What type of weather is there?</b> Know the different types of weather: sunny, cloudy, rainy, windy and snowy.</p> <p><b>What happens in Autumn?</b> Know that leaves fall from the trees in Autumn. Know that the leaves change colour. Know that conkers fall from conkers trees. Know that animals hibernate. Know that temperatures drop and it is colder.</p> <p><b>What happens in Spring?</b> Know that plants and flowers start to grow. Know that baby lambs are born.</p> <p><b>What happens in Summer?</b> Know that it is warm in Summer. Know that we wear lighter clothes in Summer to keep us cool.</p> <p><b>What happens in Winter?</b> Know that there are no leaves on the trees in Winter. Know that it is cold in Winter and that when it freezes, water turns to ice.</p>	<p><b>What are the four seasons?</b> Know there are 4 seasons: spring, summer, Autumn and Winter. Know the 12 months of the year. Know that Spring is from March to May. Know that Summer is from June to August. Know that Autumn is from September to November. Know that Winter is from December to February. Know that Harvest time is in Autumn.</p> <p><b>What changes happen in Autumn?</b> Know that in Autumn temperatures drop and it gets darker earlier because there is less sunlight. Know that skies can be overcast. Know that birds migrate to warmer climates in Autumn. Know that in Autumn leaves change colour and start to fall from trees. Know that in Autumn animals begin storing up food for the Winter.</p> <p><b>What changes happen in winter?</b> Know that Winter is the coldest time of the year. Know that there are less and less hours of daylight. Know that we sometimes see snow, frost in the morning, sleet blizzards and hail. Know that water freezes to ice. Know that many plants stop growing.</p>		

	<p>Know there is often frost on the ground.</p>	<p>Know that some trees lose all their leaves. Know some animals including hedgehogs and tortoises hibernate.</p> <p><b>What changes happen in Spring?</b>          Know that in Spring, the temperatures rise and the ground starts to warm up. Know that flowers begin to grow. Know that Spring is associated with rebirth and growth. Know that some baby animals are born (e.g. lambs, chicks).</p> <p><b>What changes happen in Summer?</b>          Know that in Summer, it is the hottest time of the year. There is usually sunshine, generally dry weather but there may be thunderstorms too! Know that in Summer, flowers and trees are in bloom. Know that there are different types of weather- rain, sun, storms, overcast.</p>		
<p><b>Disciplinary Knowledge (Skills)</b></p>	<p>Understand the effects of changing seasons on the natural world around them.</p> <p>Able to comment on the weather.</p>	<p>Able to observe changes across the four seasons.</p> <p>Able to observe and describe weather associated with the seasons and how day length varies.</p> <p>Able to put the 12 months in order of the year.</p> <p>Able to discuss what different types of weather are like.</p> <p>To be able to <b>classify</b> clothing for different types of weather/climate.</p> <p>To be able to <b>investigate</b> rainfall over a period of time.</p> <p>To be able to <b>observe and measure</b> rainfall over time.</p>		

		<p>To carry out a <b>simple test</b> to measure and record rainfall.</p> <p>To be able <b>answer questions</b> about what we have found out.</p> <p>To <b>record</b> in a simple chart or table.</p> <p>To be able to keep a simple class weather chart.</p>		
<b>Vocab</b>	rainy, windy, sunny, snowy, cloudy.	Seasons; spring, summer, autumn, winter Year, months, days, Hot, warm, mild, cold Sunny, Cloudy, Rain, sleet, snow, hail, thunder, lightning, rainbow, Wet, damp, dry, windy, breezy, gust, Temperature, Degrees Celsius, Thermometer, Weather vane, Anemometer		

### Animals including Humans

<p><b>Substantive Knowledge</b></p>	<p><b>What types of animal are there?</b> Know that animals can be categorised: pets, farm animals, zoo animals. Know different pets: cat, dog, rabbit, guinea pig, hamster... Know different farm animals: pigs, sheep, chickens, horse, goat.. Know different zoo animals: zebra, giraffe, elephant, panda, lion, monkey...</p> <p><b>What can you see/ hear/ touch/ taste/ smell?</b> Know we use our nose to smell. Know we use our tongue to taste. Know we use our eyes to see.</p>	<p><b>What are our senses and why are they important?</b> Know the basic parts of the human body including: arm, leg, waist, ankle, knee, back, head, feet, toes, wrist, shoulder, elbow, thumb, teeth. Know the names of the 5 senses. (Touch, smell, sight, hearing, taste). Know and name the parts of the body associated with each of the 5 senses. (We smell using our nose. We taste using our tongue. We touch using parts of our body, like our hands. We see using our eyes. We hear using our ears) and know what these do.</p> <p><b>What are the main animal types in the food chain?</b></p>	<p><b>What is a life cycle?</b> Know that animals have offspring that grow into adults. Know what the word 'off spring' means. Know the stages of a life cycle of an animal and put these in order using the knowledge they have gained. E.g. a chicken, frog, dragonfly, butterfly life cycles. Know the stages of human development and talk about how we change as we grow older.</p> <p><b>How do we stay healthy?</b> Know the basic needs of animals, including humans, for survival (water, food and air). Know what a healthy lifestyle is and talk about it. Know the importance for humans of eating the right amounts of different types of food. <b>(Links made in Year 2, Term 5- Food and Nutrition)</b> Know the importance for humans of exercise.</p>	<p>To know and identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat To know and identify that humans and some other animals have skeletons and muscles for support, protection and movement</p>
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	<p>Know we use our hands and feet to touch. Know we use our ears to hear.</p> <p><b>What is in our local wildlife?</b> Know about local wildlife and how to care for them. Know that bees, dragonflies, ladybirds and ants can be found in our Summer garden.</p> <p><b>Why are bees important?</b> Know that bees fly from flower to flower and make more grow. Know that we need bees so flowers and food can grow.</p>	<p>Know that a <b>Carnivore</b> is an animal that eats meat. (lions, eagles, crocodiles) Know that a herbivore is an animal that only eats plants. (cows, giraffes, elephants) Know that an <b>omnivore</b> is an animal that eats plants and meat. (humans, squirrels, robins) Know what a backbone is. (Backbone is the column of small linked bones down the middle of your back). Know that an animal which has a backbone is called a vertebrate. (insects, arachnids, molluscs). Know that an animal without a backbone is called an <b>invertebrate</b>. Know what cold blooded means. (A body temperature that changes according to the surrounding temperature).</p> <p><b>What are the different types of animals?</b> Know and identify a variety of common animals. (Some common <b>Mammals</b> are pets such as dogs, cats and hamsters Farm animals... cows, sheep, horses Wild animals.... Foxes, hedgehogs, lions. Some common <b>fish</b> are salmon, cod, tuna. Some common <b>birds</b> are ducks, chickens and penguins. Some common <b>reptiles</b> are snakes and lizards. Some common <b>amphibians</b> are frogs and toads). Know that humans are mammals.</p>	<p>Know the importance to humans of hygiene.</p> <p>Know and apply the scientific language to talk about what they have found out. Know what they have learnt following a visit and be able to share what they have learnt.</p>	
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<b>Disciplinary Knowledge (Skills)</b>	<p>Able to join in with the RSPB Big Garden Birdwatch to learn about the local wildlife.</p> <p>Describes what they see, hear and feel whilst outside.</p> <p>Explores the natural world around them.</p>	<p>Able to identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p> <p>Able to identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>Able to describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</p> <p>Able to identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p> <p>Able to identify, draw and label the basic</p>	<p>Notices that animals, including humans, have offspring which grow into adults.</p> <p>Able to find out about and describe the basic needs of animals, including humans, for survival (water, food and air).</p> <p>Able to describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p>Able to order the stages of an animals' life cycle.</p> <p>Able to investigate the different stages of an animals' life cycle over time.</p> <p>To order photos of children and their families and discuss the changes.</p> <p>To draw the different stages of human life.</p> <p>To discuss the importance of a of exercise.</p>	<p>To begin to use their scientific experiences to raise questions for lines of investigation.</p> <p>Following the above – start to use different types of scientific enquiries to answer them.</p> <p>Describe briefly the aim of the investigation.</p> <p>Make simple predictions before collecting results.</p> <p>Set up simple practical enquiries, comparative and fair tests ( identifying some factors independently that make it a fair test).</p>

		<p>parts of the body.</p> <p>To be able to observe closely using simple equipment i.e. a microscope.</p> <p>To carry out <b>simple tests</b> using our senses. i.e. feeling objects in a feely bag, smelling different crisp flavours, guessing the flavour of fruit pastilles by tasting.</p> <p>To <b>research</b> to find out how good the senses of other animals are e.g. how well badgers can smell, bats can hear or owls can see.</p> <p>To be able to <b>record</b> data in a table.</p> <p>To be able to <b>describe and compare</b> the structure of a variety of common animals. *(Possibility of bringing in a real pet)</p> <p>To be able to <b>sort and group</b> animals with some help.</p> <p>To be able to <b>record data</b> in simple ways (Venn diagram).</p>	<p>To explore what happens to your body when you exercise.</p> <p>To be able to record data in a tally chart, table and flow diagram.</p> <p>To be able to use observations to suggest <b>answers to questions</b>. i.e. how many caterpillars? Do any occur on more than one plant?</p> <p>To be able to <b>perform a simple test</b>.</p> <p>To be able to <b>observe</b> using simple equipment.</p> <p>To <b>record</b> their observations in a variety of ways i.e. a diary, pictures, photos, videos, etc.</p> <p>To <b>ask questions</b> to a visitor about the stages of human development. i.e. a new mother and her baby.</p> <p>To <b>sort</b> children's clothes from different ages of children and discuss the changes.</p> <p>To <b>measure</b> body parts of different ages, using non-standard units.</p> <p>To <b>investigate</b> relationships between the ages of children and the size of body parts. i.e. length of feet, handspan, etc.</p> <p>To present findings in a table. To <b>classify</b> which foods make a healthy diet.</p> <p>To investigate which exercise make you puff the most.</p> <p>To carry out a survey linked to hygiene e.g. how often do we wash ourselves?</p> <p>To keep a tally for how many times we complete daily tasks e.g. brushing teeth, washing hands, having a bath, washing hair, etc.</p>	<p>Systematically use a range of equipment to gather accurate results with a wider range of equipment, using standard units (including thermometers and data loggers).</p> <p>Work safely identifying areas of potential risk.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, (line graphs where appropriate) and tables so it is clear to the reader.</p> <p>Use results to draw more detailed conclusions from their data (oral or written).</p> <ol style="list-style-type: none"> <li>1) Observation over time</li> <li>2) Pattern Seeking <ul style="list-style-type: none"> <li>-Investigate child led questions with guidance E.g. Can people with longer legs run faster?</li> </ul> </li> <li>3) Identifying, grouping and classifying <ul style="list-style-type: none"> <li>-classifying and grouping food based on their content</li> <li>-compare, contrast and classify skeletons of a range of animals</li> </ul> </li> <li>4) Comparative /Fair testing</li> <li>5) Researching using secondary sources <ul style="list-style-type: none"> <li>-research food contents/use labels</li> <li>-research parts and functions of the skeleton</li> </ul> </li> <li>6) Problem solving</li> <li>7) Model making – make a moving model of a hand or whole skeleton</li> </ol>
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<b>Vocab</b>	Names of common birds and wildlife, the 5 senses, explore, find out about, observe.	Birds, fish, amphibians, reptiles, mammals Vertebrates and invertebrates, Feathers, scales, gills, fins, hair, land, water, backbone, skeleton Carnivores, herbivores, omnivores, Meat, plants Common parts/structures of animals, Names of animals that can be found in the school grounds Names of animals that the children keep as pets	Offspring, Life cycle, diet, Exercise, Disease, Classification – Birds, fish, amphibians, reptiles, mammals and invertebrates Classification - Carnivores, herbivores, omnivores Stages of growth of many insects – egg, larva, pupa, adult Names of some invertebrates – ladybirds, butterflies, dragonflies, etc Names of some amphibians – smooth newt, common frog, toad Stages of life –baby, toddler, child, teenager, adult Life processes – growth, nutrition (feeding), respiration (breathing is part of this) Foods – healthy, grow, strong, energy	movement, muscles, bones, support, protect, skull, ribs, spine, muscles, joints, nutrition, skeletons, support, protection, protein, carbohydrate, fat, sugar, vitamins, minerals
<b>Everyday Materials</b>				
<b>Substantive Knowledge</b>	<b>Why is plastic bad for our environment?</b> Know that items such as bottles, plates, bags etc are made from plastic. Know that plastic is bad for our environment. Know that our rubbish ends up on a landfill. Know that we need to protect our animals in the sea.	<b>What is a material?</b> Know what the word material means: the 'stuff' an object is made from. Know the difference between an object and the material from which it is made.  <b>What are the types of everyday materials?</b> Know the names of a variety of everyday materials (wood, plastic, glass, rock).  <b>What are the properties of these materials?</b> Know that you can put materials in to different groups by answering questions about the material. E.g. Hard or soft? Stretchy or stiff? Shiny or dull? Rough or smooth? Bendy or not bendy? Waterproof or not waterproof? Absorbent or not absorbent? Transparent or opaque?	<b>What is the object and what is it made from?</b> Know how to distinguish between the object and the material it is made from. Know a variety of everyday materials including glass, plastic, wood, metal, rock.  <b>What is the most suitable material for the purpose?</b> Know the suitability of a variety of everyday materials. Know how to carry out a simple test. Know ways of recording their findings. Know science vocabulary linked to the project.  <b>What does being safe in science mean?</b> Know simple health and safety i.e. don't shine a torch in other's eyes.  <b>What are objects made from and why?</b> Know that a bottle is made from plastic, a jar is made from glass, etc.	To know how to compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. To know and describe in simple terms how fossils are formed when things that have lived are trapped within rock. To know and recognise that soils are made from rocks and organic matter



		Know how to describe the simple physical properties of a variety of everyday materials.	<b>How does the material change its shape?</b> Know that the shape of solid objects made from some materials can be changed by squashing, bending, twisting, etc.	
<b>Disciplinary Knowledge (Skills)</b>	Explores the natural world around them.	<p>Able to distinguish between an object and the material from which it is made.</p> <p>Able to identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</p> <p>Able to describe the simple physical properties of a variety of everyday materials.</p> <p>Able to compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>Able to identify a variety of everyday objects.</p> <p>Able to identify and describe the simple physical properties of a variety of everyday materials using their senses.</p> <p>To <b>classify</b> everyday materials.</p> <p>To <b>compare and group</b> together a variety of everyday materials on the basis of their physical properties.</p> <p>To be able to observe carefully, using simple equipment.</p>	<p>Able to identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>Able to find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>To be able to find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>To be able to identify and <b>compare</b> the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>To be able to use their observations and ideas to suggest <b>answers to questions</b>.</p> <p>To be able to gather and <b>record data</b> to help in answering questions.</p> <p>To be able to <b>perform simple tests</b> i.e. how well do materials bounce? What are the uses of wood? How flexible are plastics? Which tights are the stretchiest? Which material is best for letting light through? On which surface will the car travel the furthest? How well can we change the shapes of some solid objects?</p> <p>To be able to use simple <b>measurements</b> to gather data.</p>	<p>1) Observation over time</p> <ul style="list-style-type: none"> <li>- observe rocks closely</li> <li>- observe how rocks change over time (e.g. gravestones or old buildings – sandstone and acid rain)</li> <li>- observe soils closely</li> </ul> <p>2) Pattern Seeking</p> <ul style="list-style-type: none"> <li>- See comparative/fair testing</li> </ul> <p>3) Identifying, grouping and classifying</p> <ul style="list-style-type: none"> <li>- classify rocks based on their appearance, hardness, absorbency</li> <li>- classify soils based on their appearance and properties</li> </ul> <p>4) Comparative /Fair testing</p> <ul style="list-style-type: none"> <li>- Devise a test to investigate the water retention in soils.</li> <li>- devise an experiment to test hardness of rocks</li> </ul> <p>5) Researching using secondary sources</p> <ul style="list-style-type: none"> <li>- investigate how fossils are formed</li> <li>- research the work of Mary Anning</li> </ul> <p>6) Problem solving</p> <ul style="list-style-type: none"> <li>- identify animals and their habitats based on their fossils</li> <li>- given part of a fossil complete the remainder</li> </ul>

			To be able to use simple secondary sources to find answers (non-statutory). To be able to <b>talk about</b> what they have found out and how they found it out.	
<b>Vocab</b>	plastic, environment, rubbish	<b>Properties, Material, Liquid, Surface - Object,</b> wood, plastic, glass, metal, water, rock, brick, fabric, sand, paper, flour, butter, milk, soil Properties of materials: hard/soft, stretchy/not stretchy, shiny/dull, rough, Smooth, Bendy - Can be bent easily Not bendy, Waterproof, Absorbent, Transparent - Able to see through it easily Opaque - Not able to see through Verbs associated with materials: crumble, squash, bend, stretch, twist Senses: touch, see, hear, smell and taste	Types of materials: wood, plastic, glass, metal, water, rock, brick, fabric, sand, paper, flour, butter, milk, soil Properties of materials: hard/soft, stretchy/not stretchy, shiny/dull, rough/smooth, bendy/not bendy, transparent/not transparent, sticky/not Senses: touch, see, hear, smell and taste Properties, Material, Rubber, Inflatable, Fabric Cloth, Flexible, Waterproof, Reflective, Magnetic	Rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorb water, soil, fossil, marble, chalk, granite, sandstone, slate, soil, peat, sandy/chalk/clay soil, erosion, weathering, minerals, permeable, impermeable
<b>Plants</b>				
<b>Substantive Knowledge</b>	<b>Why are trees important?</b> Know that paper is made from trees. Know that it is bad to chop down trees. Know that trees give us oxygen. (Link to Greta Thunburg)	<b>*Collect seeds in the Autumn to be used in Spring/Summer.</b> <b>What are plants?</b> Know that a plant is a living thing that usually grows from the ground. <b>What happens to the leaves on trees?</b> Know that in winter, deciduous trees usually have no leaves on their branches. Know that an evergreen tree keeps its green leaves all year. Know in autumn, the leaves on deciduous trees usually change colour and fall off. Know that you can identify a tree by observing the leaves.	<b>*Collect seeds in the Autumn to be used in Spring/Summer.</b> <b>How do plants grow?</b> Know what a bulb is and how it is different to a seed. Know some plants that grow from a bulb. Know some plants that grow from a seed. Know how seeds and bulbs grow into mature plants. Know that seed growth takes place over time. <b>What do plants need to grow?</b> Know that plants need water, light and a suitable temperature to grow and stay healthy. <b>What are common trees?</b>	To know and identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers To know and 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 To know and investigate the way in which water is transported within plants To know and explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal

		<p><b>What are common garden and wild plants?</b>          To know the names of some common garden plants. (Rose, poppy, lavender, sunflower, pansy)          To know the names of some common wild plants. (Nettle, daisy, clover, buttercup, ivy, dandelion)          Know that we mustn't pick too many flowers.          Know how the trunks of trees are similar and different to each.</p> <p><b>What are the different parts of a plant and what is their function?</b>          Know the basic structure of a variety of common plants including roots, stem/trunk, leaves and flowers.          Know and able to identify the main parts of a plant. (flower, roots, stem, leaves).          Begin to know the function of the main parts of a plant.          Know what the roots are and describe these.          (See vocab for more info)          Know that on some plants fruit or vegetables start to grow.          (Links made with Seasonal Change unit)</p>	<p>Know the names of common trees. (<a href="#">Link to trees in the local area or school grounds</a>)</p> <p><b>What are the different parts of a plant and what is their function?</b>          Know the basic structure of plant and that part of the plant is above the ground and part below the ground.          Know the basic function of what each part does e.g. the roots anchor the plant to whatever it is growing on. (<a href="#">Build upon this from year 1 – further embedding this knowledge</a>)</p>	
<b>Disciplinary Knowledge (Skills)</b>	<p>Explore the natural world around them.</p> <p>Describes what they see, hear and feel whilst outside.</p>	<p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</p> <p>Identify and describe the basic structure of a variety of common flowering plants,</p>	<p>Able to observe and describe how seeds and bulbs grow into mature plants.</p> <p>Able to find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>To be able to observe and describe how seeds grow into mature plants.</p>	<p>1) Observation over time – observe what happens to plants under different conditions over time (example if leaves or roots are removed).          Observe the effect of putting flowers in coloured water.</p>

		<p>including trees.</p> <p>To be able to <b>ask simple questions</b> and recognise that they can be answered in different ways. What plants can we see? How can we identify a plant? Which plant is the thinnest? Tallest? Etc.</p> <p>To <b>gather questions</b> as a class about what they want to know about plants in the local habitats.</p> <p>To be able to choose the most appropriate method for a particular <b>question</b>.</p> <p>To be able to identify and <b>describe</b> flowers.</p> <p>To be able to use parts of the plant to identify and <b>classify</b> it.</p> <p>To <b>measure</b> the distance around a tree.</p> <p>To estimate how tall a tree is.</p> <p>To be able to describe and identify trees by observing their leaves.</p> <p>To be able to <b>ask simple questions</b> and recognise the ways in which they can be answered. E.g. do the weeds with the longest leaves have the longest roots?</p>	<p>Able to apply the scientific vocabulary to talk about what they have found out.</p> <p>To be able to find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>To be able to perform a <b>simple test</b> e.g. Do plants need light to grow? What type of temperature do plants need so that they can grow?</p> <p>To be able to recognise that <b>questions</b> can be answered in a range of ways.</p> <p>To be able to observe closely using simple equipment.</p> <p>To be able to <b>sort</b> objects using observable features e.g. sort different types of seeds, making close observations.</p> <p>To find different criteria for <b>sorting</b> the seeds e.g. colour, shape, size, and texture.</p> <p>To be able to gather and <b>record data</b> to help in answering a question.</p> <p>To use their observations and ideas to suggest <b>answers to questions</b>.</p> <p><b>*Opportunities for planting should be made throughout the year i.e. bulbs in Autumn. This can be planned into your garden time or within the classroom.</b></p>	<p>Spot flowers, seeds, berries and fruits throughout the year.</p> <p>Observe pollinators</p> <p>Observe seeds being blown from trees</p> <p>2) Pattern Seeking</p> <p>-Observe what happens when plants are put in different conditions</p> <p>- identify plants that particular pollinators are drawn to or colours of flowers that are most popular</p> <p>3) Identifying, grouping and classifying</p> <p>-classify seeds in a range of ways including dispersal</p> <p>4) Comparative /Fair testing</p> <p>5) Researching using secondary sources</p> <p>-research different types of seed dispersal</p> <p>6) Problem solving</p> <p>Create a new species of plant</p> <p>7) Model making – make a model of a plant or seed, or a model to represent the process of pollination</p>
<b>Vocab</b>	tree, oxygen, leaves, flowers	<p><b>Flowers, leaf, stem, roots, seed, evergreen, deciduous,</b></p> <p>Trees - deciduous, evergreen, ash, birch, beech, rowan, common lime, oak, sweet chestnut, horse chestnut, apple, willow, sycamore, fir, pine, holly, etc</p>	<p><b>Flower, Petal, Leaf,root, Stem, Seed, Bulb, Sunlight, Germination, Sprout, Seed dispersal</b></p> <p>Trees - deciduous, evergreen, ash, birch, beech, rowan, common lime, oak, sweet chestnut, horse chestnut, apple, willow, sycamore, fir, pine , holly, etc</p>	<p>air, light, water, nutrients, soil, reproduction, transportation, dispersal, pollination, flower, roots, stem/trunk, leaves, structure, function, photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal – wind</p>

		<p>Wild flowering plants - cleavers, coltsfoot, daisy, dandelion, garlic mustard, mallow, mugwort, plantain, red clover, self heal, shepherd's purse, sorrel, spear thistle, white campion, white deadnettle and yarrow.</p> <p>Garden plants – crocus, daffodil, bluebells, etc</p> <p>Parts of plants – roots, branch, trunk, stalk, leaf, flower, petal, seeds, bulbs and twigs</p> <p>Habitat</p>	<p>Wild flowering plants - cleavers, coltsfoot, daisy, dandelion, garlic mustard, mallow, mugwort, plantain, red clover, self heal, shepherd's purse, sorrel, spear thistle, white campion, white deadnettle and yarrow.</p> <p>Garden plants – crocus, daffodil, bluebells, etc</p> <p>Parts of plants – roots, branch, trunk, stalk, leaf, flower, petal, seeds, bulbs and twigs</p> <p>Need of plants – water, light, heat, temperature.</p>	dispersal, animal dispersal, water dispersal
<b>Living Things and Their Habitats</b>				
<b>Substantive Knowledge</b>	<p><b>What is a wild animal?</b></p> <p>Know that some animals are wild. Know that these animals do not need looking after. They are not sold as pets.</p> <p>Know that robins, blue tits, seagulls, blackbirds are all birds and are wild.</p> <p>Know that zoo animals do not live in the wild. In the UK.</p> <p>Know that some animals are pets.</p>		<p><b>What is a living thing?</b></p> <p>Know what is a living thing, non-living thing and something that has never been alive.</p> <p><b>Why are animals suited to their habitat?</b></p> <p>Know that most living things are suited to their habitat.</p> <p>Know that a habitat provides for the basic needs of animals and plants.</p> <p><b>What is a food chain?</b></p> <p>To be able to describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p>	
<b>Disciplinary Knowledge (Skills)</b>	Explores the natural world around them.		<p>Able to explore and compare the differences between things that are living, dead, and things that have never been alive.</p> <p>Able to 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.</p>	

			<p>Able to identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>To be able to explore and compare the differences between things that are living, dead, and things that have never been alive.</p> <p>To be able to identify that most living things live in habitats to which they are suited.</p> <p>To describe how different habitats, provide for the basic needs of different kinds of animals and plants, and how they depend on each other.</p> <p>To visit different habitats in school and the local area e.g. Gazen salts, and describe what a habitat is like there, e.g. damp/dry, light/dark, warm/cold, etc.</p> <p>To be able to describe how animals obtain their food from plants and other animals, using the idea of a simple food chain.</p> <p>To identify and name different sources of food.</p> <p>To be able to identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>To be able to ask <b>simple questions</b> and recognise that they can be answered in different ways.</p> <p>To be able to observe closely.</p> <p>To be able to gather and <b>record data</b> to help answer a question i.e. How many different living things can we find? What are different habitats like? Why would an animal live in that habitat? (Links with Art – Make a diorama) Which caterpillar will survive? Where is the most popular place for animals to live?</p> <p>To be able to record data in a tally chart i.e. to show which animals are found in the habitat.</p> <p>To be able to record data in a bar chart.</p>	
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<b>Vocab</b>	wild, pet, common flower names, trees, animal names and young animals i.e. lamb, calf, foal.		<p>Habitat, micro habitat</p> <p>Pond, meadow, log pile, woodland, river, lake, beach, cliff</p> <p>Organism – plant, animal</p> <p>Trees - deciduous, evergreen, ash, birch, beech, rowan, common lime, oak, sweet chestnut, horse chestnut, apple, willow, sycamore, fir, pine, holly, etc</p> <p>Wild flowering plants - cleavers, coltsfoot, daisy, dandelion, garlic mustard, mallow, mugwort, plantain, red clover, self heal, shepherd's purse, sorrel, spear thistle, white campion, white deadnettle and yarrow.</p> <p>Garden plants – crocus, daffodil, bluebells, etc</p> <p>Parts of plants – roots, branch, trunk, stalk, leaf, flower, petal, seeds, bulbs and twigs</p> <p>Invertebrates – snail, slug, woodlouse, spider, beetle, fly, etc</p> <p>Pond animals – pond skater, water slater, ramshorn snail, pond snail, leech, common frog, smooth newt, etc</p> <p>Habitat, Micro habitat, Carnivore, Omnivore, Food chain, Characteristics, Adaptation, Source</p>	