

A bespoke scheme of learning for Science

Subject: Science - The Natural World			
Year group: Foundation 2		Unit of Learning: Who am I?	
Future Learning			
In year one pupils will learn to name the external body parts and about the five senses. They will learn the names of common wild and garden plants. Pupils will learn animals can be classified into different groups (amphibian, reptile, mamma, fish, bird) and by what they eat - (carnivore, herbivore, omnivore). They will sort things in to living and non living and will learn to name the parts of a plant (petals, stem, leaves, roots, trunk, branches)			
Autumn 1			
Learning Objective	Substantive knowledge	Suggested Activity	Through Provision
<p>To ask questions about aspects of their familiar world.</p> <p>To talk about some things they have observed such as plants animals and natural objects.</p> <p>To talk about why things happen and how things work.</p> <p>To develop an understanding of growth decay and changes over time.</p> <p>To show care and concern for living things and the environment.</p>	<p>To know that our woodland is a special place for nature.</p> <p>To know its is important to be quiet, careful and kind when exploring nature.</p> <p>To know the parts of some plants including petals, leaves, trunk, branches.</p> <p>To know and identify the different animals found in our woodland and use the correct names to describe them insects, minibeasts, spider, snail, slug, ant, beetle, caterpillar, ladybird, woodlouse, earwig, harvestman, crane fly, fly, moth, bird, hedgehog, rabbit, fox.</p> <p>To know that in summer the trees have green leaves, there are flowers and fruits on plants.</p>	<p>Introduce 'Welly Wednesday' sessions in the school grounds. Explore the school woodland. Discuss and ask questions about what they observe.</p>	<p>OUTDOOR</p> <p>Music Area <i>Creating sound / louder / soft</i> CD Player Traditional Nursery Rhymes Percussion Instruments Scarves, pom poms Ribbons</p> <p>Construction Area <i>Gravity -falling/dinosaurs- carnivores herbivores</i> Duplo - Dinosaurs Stickle Bricks</p> <p>Water Area <i>features of animals and their habitats</i> Number ducks and nets Number song 5 little ducks</p> <p>Sand Area <i>Rocks and soils - particles</i> Seaside Theme Spades, buckets, rakes, sieves, moulds, shells, pebbles, crabs, starfish, 2 deckchairs</p> <p>Play tray/small world Down on the Farm Buildings, animals, fences, vehicles, artificial grass <i>features of animals and their habitats / life cycles and baby animals</i></p>
<p>To ask questions about aspects of their familiar world.</p> <p>To ask questions about aspects of their familiar world.</p>	<p>To know the parts of some plants including petals, leaves, trunk, branches.</p> <p>To know that in summer the trees have green leaves, there are flowers and fruits on plants.</p> <p>To know that some food we eat comes from plants.</p>	<p>Explore the school grounds and harvest the school produce. Harvest apples from the school orchid and make apple crumble</p>	<p>Gravel Construction Area <i>Rocks and soils - particles mass / forces</i> Large wooden brick trolley, crates, planks, tyres, pipes, steering wheels Weight and Capacity Diggers, scoops, buckets, wheelbarrows</p>

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

A bespoke scheme of learning for Science

<p>To talk about some things they have observed such as plants animals and natural objects. To talk about why things happen and how things work. To develop an understanding of growth decay and changes over time. To show care and concern for living things and the environment. ELG To understand some important processes and changes in the natural world around then including seasonal changes and changes of state.</p>	<p>To know that we can eat some plants or parts of some plants (roots and fruits). To know that at the end of summer and the start of autumn is harvest time in the UK / our country. To know that harvest means collecting all the plants or parts of plants that we can eat. To know that when we heat / cook food it changes (colour /texture).</p>		<p>Wheeled resources and track <i>Forces</i> Scooters, go-kart, tandem, rickshaw, road signs, cones, vests Grass Area <i>Forces</i> Continuous gross motor skills Throwing and catching Kicking, rolling, dribbling patting skills Running, jumping, skipping, hopping skills Space hoppers Hoops, bean bags, target games, stilts Physical Development <i>Forces</i> Gross motor development Balancing, crawling, swinging, side stepping, climbing, coordination, strength, control Forest Climbing Grab and Grasp Net Discovery Area <i>features of animals and their habitats</i> Bug hotels Minibeast identification posters Clipboards and pens Gardening equipment Trowels, rakes, forks, plant pots Aprons, gloves Magnifying glasses, bug catchers, minibeast fact cards Potion Lab</p> <p>INDOOR Role-Play <i>body parts</i> Home Corner Doctors Surgery Malleable Area <i>forces</i> Recipe books Ingredients Tools/rolling pins Cutters/trays Play dough Bakery - cakes, buns and biscuits</p>
	<p>To know the parts of some plants including petals, leaves, trunk, branches. To know that in summer the trees have green leaves, there are flowers and fruits on plants. To know that some food we eat comes from plants. To know that we can eat some plants or parts of some plants (roots and fruits). To know that when plants die they decay (break down).</p>	<p>Explore the school poly tunnel - and the compost bins. Look at the food that is growing and what happens to the plants when they die - look at the different levels of decay.</p>	

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

A bespoke scheme of learning for Science

<p>To ask questions about aspects of their familiar world.</p> <p>To talk about some things they have observed such as plants animals and natural objects.</p> <p>To talk about why things happen and how things work.</p> <p>To develop an understanding of growth decay and changes over time.</p> <p>To show care and concern for living things and the environment.</p> <p>To ask questions about the things they have observed such as plants animals.</p>	<p>To know that we can taste and smell food using our tongue for tasting and our nose for smelling.</p> <p>To know that foods taste and smell different.</p> <p>To know that different parts of our bodies have different names.</p> <p>To know the names and identify head, neck, shoulders, arms, hands, fingers and thumbs, chest, stomach, legs, feet, toes.</p> <p>To begin know we have five senses, sight, smell, taste, touch and hearing.</p> <p>To know that our senses help us to understand the world around us.</p> <p>To begin know that we use our eyes to see, our ears to hear, our nose to smell and our tongue to taste.</p> <p>To begin know we experience touch through our skin.</p>	<p>Taste the food we harvest from our school grounds. Talk about the food we like and dislike and why.</p> <p>Talk about the different body parts and how we use them. Explore our 5senses through practical activities. Name and label body parts.</p>	<p>Construction Area <i>Forces</i> Writing Box Clip boards Tape measures Toolboxes Vest/gloves/goggles Water Area <i>forces / water pressure / sinking and floating / dry and wet</i> Fine motor: Sponges, flannels for squeezing Capacity language and experimenting Water wheels Pumps/pipettes Containers, jugs, funnels Play tray/small world <i>features of animals and their habitats</i> Autumn theme Woodland animal habitats</p>
---	---	--	---

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

A bespoke scheme of learning for Science

Subject: Science - The Natural World			
Year group: Foundation 2		Unit of Learning: Food Glorious Food	
Future Learning			
<p>In year one pupils will learn to name the external body parts and about the five senses. They will learn the names of common wild and garden plants. Pupils will learn animals can be classified into different groups (amphibian, reptile, mamma, fish, bird) and by what they eat - (carnivore, herbivore, omnivore). They will sort things in to living and non living and will learn to name the parts of a plant (petals, stem, leaves, roots, trunk, branches)</p>			
Autumn 2			
Learning Objective	Substantive knowledge	Suggested Activity	Through Provision
<p>To talk about some things they have observed such as plants, animals, natural and found objects. To have greater awareness of seasonal change. To ask questions about aspects of their familiar such as the place where they live or the natural world. To ask questions about the things they have observed such as plants animals.</p> <p>ELG To understand some important processes and changes in the natural world around then including seasonal changes and changes of state.</p>	<p>To know that our woodland is a special place for nature. To know its is important to be quiet, careful and kind when exploring nature. To know the parts of some plants including petals, leaves, trunk, branches. To know and identify the different animals found in our woodland and use the correct names to describe them insects, minibeasts, spider, snail, slug, ant, beetle, caterpillar, ladybird, woodlouse, earwig, harvestman, crane fly, fly, moth, bird, hedgehog, rabbit, fox. To know that in autumn the leaves of deciduous trees change colour and fall off, but evergreen trees do not. To know that in autumn there is less sunlight. To know that in autumn that some plants die. To know that in autumn there will be fewer animals and insects in the woodland.</p>	<p>Continue 'Welly Wednesday' observe and discuss autumnal changes from autumn to winter, the plants, animals and found objects.</p>	<p>OUTDOOR Music Area <i>Sound</i> CD Player Christmas songs Percussion Instruments Scarves, pom poms Ribbons and bells Construction Area <i>Gravity / forces</i> Lego Stickle Bricks Water Area <i>sinking and floating</i> Phonic ping pong balls Scissor tongs Baskets Sand Area <i>Forces / Rocks and soils</i> Building Site Metal digger Trucks, trowels, levels, spades, buckets, real bricks, tape measures, metre stick, vests, hard hats Gravel Construction Area <i>Forces / Rocks and soils</i> Weight and Capacity Diggers, scoops, buckets, wheelbarrows Large wooden scales Wheeled resources and track <i>Forces / motion / speeding up and slowing down</i> Scooters, go-kart, tandem, rickshaw, body boards, stilts</p>

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

A bespoke scheme of learning for Science

<p>To talk about some things they have observed such as plants, animals, natural and found objects. To ask questions about aspects of their familiar such as the place where they live or the natural world. To ask questions about the things they have observed such as plants animals.</p> <p>ELG To know some similarities and differences between the natural world around them and contrasting environments and what has been read in class</p>	<p>To know that there are places in the world that are different to where we live. To know that polar regions are very cold and spend most of the year covered in snow. To know some animals that live there. To begin to know some similarities that polar animals share i.e many are white, some have fur, some have a thick layer of fat.</p>	<p>Discussing polar regions, the animals and environments through the use of the water area.</p>	<p>Discovery Area <i>Features of living things and their habitats</i> Bug hotels Minibeast identification posters Clipboards and pens Gardening equipment Trowels, rakes, forks, plant pots Aprons, gloves Magnifying glasses, bug catchers, minibeast fact cards Potion Lab</p> <p>INDOOR Role-Play <i>Plants / where does food come from?</i> Fruit and Veg shop Malleable Area <i>Forces / changing state / reversible and irreversible changes</i></p>
<p>To talk about some things they have observed such as plants, animals, natural and found objects. To ask questions about aspects of their familiar such as the place where they live or the natural world. To ask questions about the things they have observed such as plants animals.</p>	<p>To know that different parts of our bodies have different names. To know the names and identify head, neck, shoulders, arms, hands, fingers and thumbs, chest, stomach, legs, feet, toes. To begin know we have five senses, sight, smell, taste, touch and hearing. To begin know that we use our eyes to see, our ears to hear, our nose to smell and our tongue to taste. To begin know we experience touch through our skin.</p>	<p>Continue to develop our 5 senses through practical activities such as a taste test, bonfire night videos etc.</p>	<p>Recipe books Ingredients Tools/rolling pins Cutters/trays Play dough Bakery - 'Little Red Hen' Construction Area <i>Forces</i> Writing Box Clip boards Tape measures Toolboxes Vest/gloves/goggles Fire Station Town People Stickle Bricks Water Area <i>Floating Sinking / animals and their habitat</i> Fine motor: Sponges, flannels for squeezing Capacity language and experimenting Polar Regions North and South Pole Animals, white rocks, iceberg, real ice Sand Area <i>animals and their habitat - carnivore herbivore</i> Dinosaur World Dry /Wet sand</p>

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

A bespoke scheme of learning for Science



A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

A bespoke scheme of learning for Science

Subject: Science - The Natural World			
Year group: Foundation 2		Unit of Learning:	
Future Learning			
<p>In year one pupils will learn to name the external body parts and about the five senses. They will learn the names of common wild and garden plants. Pupils will learn animals can be classified into different groups (amphibian, reptile, mamma, fish, bird) and by what they eat - (carnivore, herbivore, omnivore). They will sort things in to living and non living and will learn to name the parts of a plant (petals, stem, leaves, roots, trunk, branches)</p>			
Spring 1			
Learning Objective	Substantive knowledge	Suggested Activity	Through Provision
<p>To understand more about growth, decay and changes over time; To explore the natural world around them; describing what they see, hear and feel whilst outside To understanding the effect of changing seasons on the natural world around them.</p>	<p>To know that we have four seasons.</p> <p>To know that it is now Winter</p> <p>To know that in winter the temperature is much colder.</p> <p>To know that in winter there may be frost because it is so cold that water freezes and turns in to ice.</p> <p>To know that ice melts when it gets warmer (above 0°C).</p> <p>To know that in winter there is less sunlight and it gets dark earlier. (but the days will start getting longer again)</p> <p>To know that in winter there are fewer plants so it is harder for animals to find food.</p> <p>To know that in winter some animals hibernate and others move to warmer places where there is more food. (migrate/migration)</p>	<p>Welly Wednesday - Woodland discovery Season changes</p>	<p>INDOOR</p> <p>Malleable Area <i>Forces / squeeze, squash, stretch</i> play dough - Gingerbread Kitchen links to 'The Gingerbread Man' theme</p> <p>Construction Area <i>Forces mechanisms</i> Wooden dolls house Duplo Mobilo</p> <p>Water Area <i>Floating and sinking</i> Boats/people Song: Row, row, row your boat</p> <p>Sand area Pirate Theme Wet sand</p> <p>Play tray/small world</p> <p>Painting Area <i>Reversible and irreversible changes</i> Colour mixing - Powder paint: yellow, blue, then mix to make green Pastels - A wolf's head</p> <p>Workshop Area <i>Materials and their properties</i> Puppet Making Joining materials together - stick puppets and sewing a Gingerbread Man</p> <p>OUTDOOR</p>

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

A bespoke scheme of learning for Science

	<p>To know that in the UK hibernating animals include, hedgehog, bats, dormouse, frogs, toads, newts and snakes</p> <p>To know that in winter it may snow.</p>		<p>Math Shed/Area <i>Mass / comparing and classifying</i> Scales - objects for weight/balancing Sorting objects and giving reasons for their criteria Counting objects reliably 0-20 Shapes 2D</p>
<p>To identify features of living things, such as animals with legs or those with wings.</p> <p>To understand more about growth, decay and changes over time;</p>	<p>To know that plants and trees are living things.</p> <p>To know that all plants are made up of roots stem leaves and that some have flowers petals</p> <p>To know that plants grow from seeds (beans) or bulbs.</p> <p>To know that the plant's roots will grow down and then a shoot will grow up.</p> <p>To know that the plant's roots and shoot will continue to grow the plant will grow leaves and possibly flowers.</p> <p>To know that plants need water and sunlight to grow and stay healthy.</p>	<p>Plant/ nurture own bean</p>	<p>Music Area <i>Sound</i> Traditional Story CD Percussion Instruments Scarves, pom poms Ribbons, claves, Construction Area <i>Forces and mechanisms</i> Inter Star Octons Water Area <i>Floating and sinking</i> Number balls Fish Nets Buckets Number song 1,2,3,4,5 Sand Area <i>Materials / rocks and soils / particles</i> Metal, wood and plastic containers, pans, funnels, sieves, scoops, measuring jugs Gravel Construction Area <i>Materials / forces</i> Building Site linked to the story: The Three Little Pigs Wheeled resources and track <i>Forces/ speeding up slowing down/ mechanism</i> Scooters, go-kart, tandem, rickshaw, loopies, stilts</p> <p>Discovery Area</p>

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

A bespoke scheme of learning for Science

			<p><i>Plants / Animals and their habitat</i></p> <p>Gardening equipment Trowels, rakes, forks, plant pots Aprons, gloves Magnifying glasses, bug catchers, minibeast fact cards Fairy Garden</p>
--	--	--	--

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

Subject: Science - The Natural World			
Year group: Foundation 2		Unit of Learning:	
Future Learning			
<p>In year one pupils will learn to name the external body parts and about the five senses. They will learn the names of common wild and garden plants. Pupils will learn animals can be classified into different groups (amphibian, reptile, mamma, fish, bird) and by what they eat - (carnivore, herbivore, omnivore). They will sort things in to living and non living and will learn to name the parts of a plant (petals, stem, leaves, roots, trunk, branches)</p>			
Spring 2			
Learning Objective	Substantive knowledge	Suggested Activity	Through Provision
<p>To recognise some environments that are different to the one in which they live;</p> <p>To understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>	<p>To know that we have four seasons.</p> <p>To know that it is now Spring</p> <p>To know that in spring the temperature begins to get warmer.</p> <p>To know that in spring there is more sunlight and it gets dark later.</p> <p>To know that in spring some plants begin to grow again.</p> <p>To know that in spring some trees will blossom.</p> <p>To know that trees begin to grow leaves</p> <p>To know that in spring animals will be more active - we will see more on our walks</p> <p>To know that in spring animals may have babies and birds and insects will lay eggs</p> <p>To know that birds will need to build a warm safe nest for their babies and need more</p>	<p>Welly Wednesday 1 - Building a habitat for a woodland creature.</p> <p>Look around the wood and make a collection of natural materials that can be used to create a safe warm home for a woodland creature.</p> <p>Welly Wednesday 2 Signs of seasonal changes</p> <p>Welly Wednesday 3 Feeding the birds in the school woodland and around school. Provide food, water and nesting materials YouTube clip - How to help a bird! Animal Science for Kids</p> <p>Welly Wednesday 4 Building a habitat for a woodland creature. Look around the wood and make a collection of natural materials that can be used to create a safe warm home for a small woodland creature. Watch the clip - How to build a twig tower - woodland activities for kids Nature Detectives (YouTube) Identifies familiar places and features. Identifies features of materials and living things.</p> <p>Welly Wednesday 5 Number Hunt - Number recognition Finding numbers in the woodland</p>	<p>INDOOR</p> <p>Malleable Area <i>Forces / squeeze, squash, stretch</i> Plasticine - Design and make an alien Talk about different parts and features on their Alien 3D shapes</p> <p>Construction Area <i>Forces and magnetism</i> Wooden bricks Magnetic blocks</p> <p>Water Area <i>animals and their habitat / protecting the environment</i> Sea Life Oceans</p> <p>Sand area <i>Space - Solar system</i> Outer space Dry sand</p> <p>Play tray/small world <i>Space - Solar system</i> Wooden Space Station</p>

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

	<p>food because they will use lots of energy feeding their babies. They will also need fresh water to drink/wash in</p> <p>To know new animals are born e.g. chicks, lambs, ducklings.</p> <p>To know that animals live in habitats where they can find food, shelter and be safe from predators.</p> <p>To know that predators and animals that eat other animals.</p> <p>To know that different animals will build different homes within a habitat including nests, burrows, dens, dray, hives.</p> <p>To know that a home needs to be warm and safe from predators.</p> <p>To know some animals come out of hibernation e.g. hedgehogs</p> <p>To know the names of some common living and non living features of woodland environment including, tree, plant, flower, leaves, blossom, stick twig, bark, grass, bench, willow den, wild flowers, minibeast, insect, etc</p> <p>To know the names of some common plants, flowers, trees, animals, minibeasts</p>	<p>and explaining where they are e.g. on a tree, inside the willow den, next to a sign etc. Know a familiar place and describe features. Talks about the things they have observed.</p> <p>Welly Wednesday What are your favourite things about nature? Create a discovery table in the woodland - in groups discuss what your favourite things about nature are; objects, smells, textures, noises, concept eg growth. Identifies familiar places and features. Develop an understanding of positional language. Talks about what they have seen.</p> <p>Welly Wednesday Letter Hunt - identifying phonemes/graphemes around the school woodland. Know a familiar place and describe features. Talks about the things they have observed</p>	<p>OUTDOOR</p> <p>Math Shed/Area <i>Mass / comparing and classifying</i> Scales - objects for weight/balancing Counting from a given number: forwards and back Shapes 2D/3D</p> <p>Music Area <i>Sound</i> Space song CD and Star Wars Percussion Instruments Scarves, pom poms Ribbons, claves,</p> <p>Construction Area <i>Forces and mechanisms</i> Duplo - Dinosaurs Polydron</p> <p>Water Area <i>floating and sinking / animals and their habitats</i> boats, people, lighthouse Pebbles, seaweed, fish</p> <p>Gravel Construction Area <i>Forces and mechanisms</i> Building Site Trucks, diggers, trowels, levels, spades, buckets, real bricks, tape measures, metre stick, vests, hard hats</p> <p>Wheeled resources and track <i>Forces and mechanisms</i> Scooters, go-kart, tandem, signs, cones People who help us role play</p> <p>Discovery Area <i>Animals and their habitats / plants / mixtures / reversible and irreversible changes</i> Gardening equipment Trowels, rakes, forks, plant pots Aprons, gloves Magnifying glasses, bug catchers, minibeast fact cards Mud Kitchen</p>
--	--	--	---

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

A bespoke scheme of learning for Science

<p>To talk about why things happen and how things work;</p>	<p>To know that we live on a planet called Earth. To know that Earth is in space and there are other planets in space too. To know that Earth and the other planets are round (a sphere) To know that the sun is a star. To know that the sun gives us, light, heat and helps plants to grow. To know that all the planets travel around the sun. (this gives us seasons) To know that Earth has a moon that travels (orbits) around it. To know that other planets have moons too and some have more than one.</p>	<p>Demonstrate the planets orbiting the sun - school hall or outside. Talk about how planets have a moon, and some have more than one moon? Demonstrate Earth orbiting the sun and the moon orbiting Earth.</p> <p>Order the planets - nearest to the furthest from the sun. Cut and stick activity Listen to the Planet Song - to reinforce the correct order. Use sequencing planet cards to create the correct order on the board.</p> <p>Talk about the solar system and the order of the planets from the sun. Talk about what each planet is like e.g. Mars is known as the red planet ... What are the rings on Saturn made of? Talks about similarities and difference between different places. Begins to compare different environments Choose a planet Write a fact about it.</p>	
<p>To talk about why things happen and how things work;</p> <p>To understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>	<p>To know that when we cook food it changes. To know that when we cook biscuits/gingerbread they change from wet to dry, soft to hard. To know that some things soften when they get wet.</p>	<p>Gingerbread man experiment</p>	

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

		Ongoing - Water Area Sea life Introduce the creatures that live in the ocean/sea Language - starfish, seahorse, dolphins, whales, tropical fish, octopus, squid, seaweed, coral, rocks, pebbles, shipwreck, divers Talks about similarities and difference between different places	
--	--	---	--

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

A bespoke scheme of learning for Science

Subject: Science - The Natural World			
Year group: Foundation 2		Unit of Learning:	
Future Learning			
<p>In year one pupils will learn to name the external body parts and about the five senses. They will learn the names of common wild and garden plants. Pupils will learn animals can be classified into different groups (amphibian, reptile, mamma, fish, bird) and by what they eat - (carnivore, herbivore, omnivore). They will sort things in to living and non living and will learn to name the parts of a plant (petals, stem, leaves, roots, trunk, branches)</p>			
Summer 1			
Learning Objective	Substantive knowledge	Suggested Activity	Through Provision
<p>Explore the natural world around them, making observations and drawing pictures of animals and plants;</p>	<p>To know that we have four seasons.</p> <p>To know that it is now late spring</p> <p>To know that in spring the temperature gets warmer.</p> <p>To know that in spring there is more sunlight and it gets dark later.</p> <p>To know that in spring some plants begin to grow again.</p> <p>To know that in spring animals will be more active - we will see more on our walks</p> <p>To know that in spring some animals have babies and some birds and insects will lay eggs</p> <p>To know that some animals will return from the warmer places that they migrated to during the winter.</p>	<p>Welly Wednesday observing and discussing changes from spring to summer.</p>	<p>INDOOR</p> <p>Home corner <i>Animals and their habitat</i> Jungle Explorers and Jeep</p> <p>Malleable Area <i>Forces / squeeze, squash, stretch</i> Play dough - Creating jungle creature shapes Discovery mats links to maths</p> <p>Construction Area <i>Forces / mechanisms</i> Garage and cars Road signs Road workers Lego</p> <p>Water Area <i>Animals and their habitat</i> Wetlands from around the world River/Swamp/Marshland</p> <p>Sand area <i>Animals and their habitat</i> Savannah Theme Dry sand</p> <p>Play tray/small world <i>Animals and their habitat</i> jungle animals and landscape</p>

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

A bespoke scheme of learning for Science

<p>Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>	<p>To know that living things include animals, humans and plants.</p> <p>To know that all living things grow.</p> <p>To know that fruits and vegetables were once part of a living thing (a plant). When they are picked, and no longer connected to the plant they start to die.</p> <p>To know that after some time fruits and vegetables will decay (rot).</p> <p>To know that decay happens when bacteria breaks down parts of a living thing.</p> <p>To know that some food can last longer by treating it in special ways.</p>	<p>Observe and discuss growth and decay. To complete an experiment with food, observing the changes -growth and decay.</p>	<p>OUTDOOR Math Shed/Area <i>Mass / comparing and classifying</i> Scales - objects for weight/balancing Creating repeating patterns, identify the pattern, what comes next in the sequence? Shapes 2D/3D Music Area <i>Sound</i> Animal Song CD Percussion Instruments Scarves, pom poms Ribbons, claves, shaker eggs Construction Area <i>Forces and mechanisms</i> Stickle Bricks Lego Play people Water Area <i>Volume and capacity / Water pressure</i> Capacity Pouring and emptying a variety of different size containers Funnels, bottles, beakers, buckets</p>
<p>Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class;</p>	<p>To know that jungles, savannahs and deserts are found in the hotter parts of the world.</p> <p>To know jungles are hot, wet places.</p> <p>To know savannahs are hot and quite dry places.</p> <p>To know deserts are hot and very dry places.</p> <p>To know jungles are full of plants and trees.</p> <p>To know that savannahs are mostly covered with grass.</p>	<p>Discuss hot climates, the jungle, savannah and the desert. Describe the differences and similarities between the jungle and the savannah.</p>	<p>Sand Area <i>Animals and their habitat/ carnivore /herbivore</i> Dinosaur World Large dinosaurs, foliage, logs, wood, artificial grass, pebbles Play tray/small world <i>Animals and their habitat/ carnivore /herbivore</i> Woodland Theme Animals, wood, artificial grass, soil, pebbles, sticks Gravel Construction Area <i>forces and motion, speeding up and slowing down</i> Vehicles, ramps, pipes exploring speed and gradients Wheeled resources and track <i>forces and motion, speeding up and slowing down</i> Scooters, go-kart, tandem, signs, cones</p>

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

	<p>To know that jungle animals include tigers, gorillas, monkeys, snakes, crocodiles, frogs, sloths, jaguars, elephant and rhinos</p> <p>To know that Savannah animals include cheetahs, giraffes, elephants, lions, wildebeest, gazelles, antelopes, zebras, hyenas</p> <p>To know that animals need to live in a place where they can find food and shelter.</p> <p>To know that animals are suited to the habitat that they live in</p> <p>To know that animals in hot habitats have ways of keeping cool.</p> <p>To know that animals in sandy/desert habitats are often sandy coloured to keep them safe/ camouflaged</p>		<p>Discovery Area Gardening equipment Trowels, rakes, forks, plant pots Aprons, gloves Magnifying glasses, bug catchers, minibeast fact cards Mud Kitchen <i>Animals and their habitats / plants / mixtures / reversible and irreversible changes</i></p>
--	--	--	--

A bespoke scheme of learning for Science

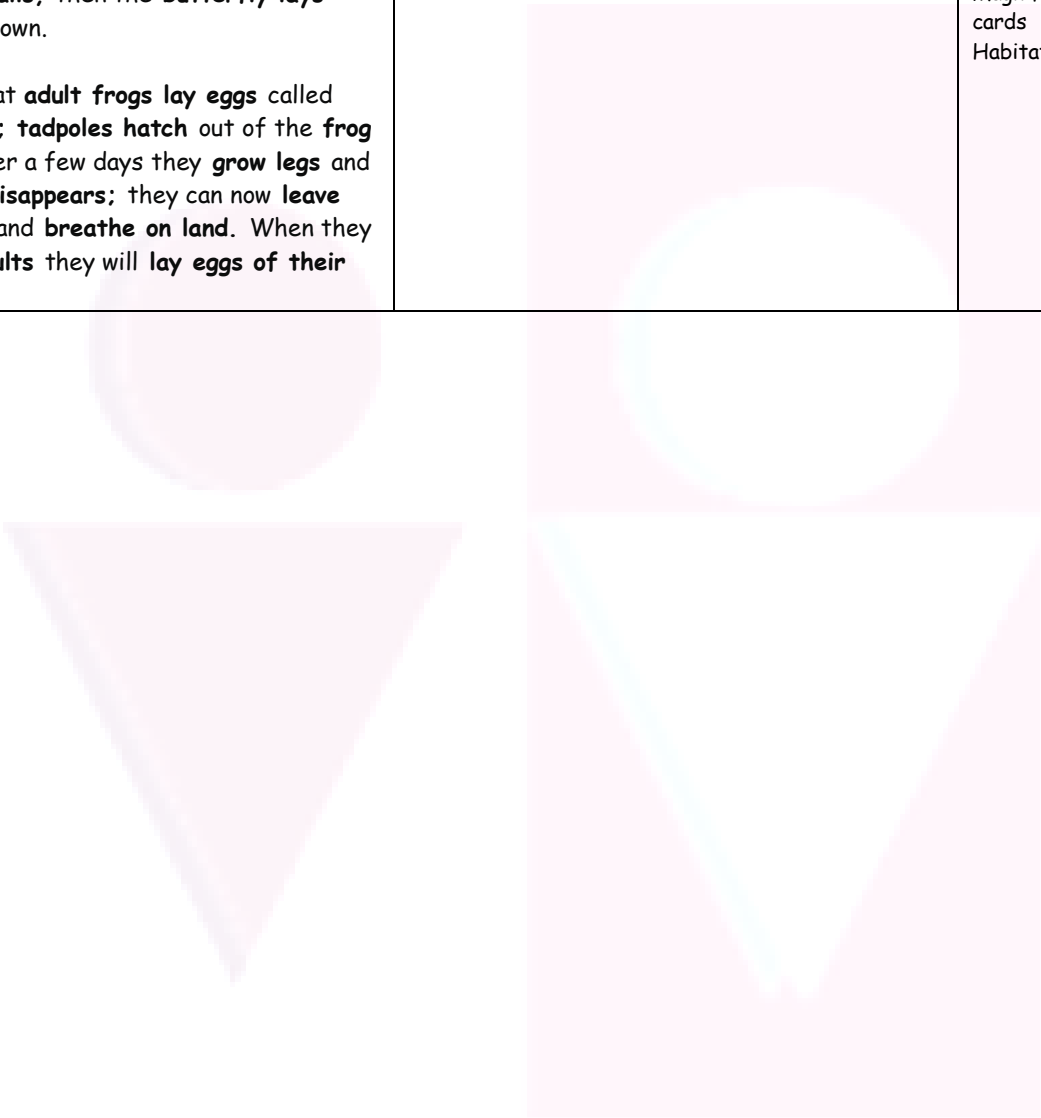
Subject: Science - The Natural World			
Year group: Foundation 2		Unit of Learning:	
Future Learning In year one pupils will learn to name the external body parts and about the five senses. They will learn the names of common wild and garden plants. Pupils will learn animals can be classified into different groups (amphibian, reptile, mamma, fish, bird) and by what they eat - (carnivore, herbivore, omnivore). They will sort things in to living and non living and will learn to name the parts of a plant (petals, stem, leaves, roots, trunk, branches)			
Summer 2			
Learning Objective	Substantive knowledge	Suggested Activity	Through Provision
To explore the natural world around them, making observations and drawing pictures of animals and plants; To understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	<p>To know that we have four seasons.</p> <p>To know that it is now summer</p> <p>To know that in summer the temperature is warm.</p> <p>To know that in summer there is more sunlight and it gets dark much later.</p> <p>To know that in summer plants are growing well and some fruits and vegetables will be ready to harvest.</p> <p>To know that in summer trees will be covered with green (usually) leaves.</p> <p>To know that in summer more babies animals might be born.</p> <p>To know that in summer baby animals will grow and might change</p> <p>To know that more animals will return from the warmer places that they visited during the winter.</p>	<p>Welly Wednesday 1 Go on a minibeast hunt and record what they saw on a tally chart and what its habitat was. Using ipads take a photo of the minibeast in its habitat.</p> <p>Welly Wednesday 2 Talk about 2 different minibeasts and discuss their similarities and differences Investigating living things in the FS2 garden/school grounds. Using magnifying glasses, use a minibeast checklist to see if and where they can find the</p> <p>Welly Wednesday 3 Features of mini beasts, find a fact card and read to a partner. Can they find this minibeast? Where was it's habitat? Exploring outdoors using scientific equipment and recording findings mathematically.</p>	<p>INDOOR Home corner <i>Animals and their habitats / plants</i> minibeast Explorers / Garden Centre Malleable Area <i>Materials / Forces / squash, squeeze, stretch</i> Play dough - Creating minibeasts Play dough discovery mats - links to maths Construction Area <i>Forces/</i> Small world Construction site Octons Water Area <i>Animals and their habitat</i> Pond Life Life cycle of a frog/duck Sand area <i>Plants</i> In the garden Dry soil Play tray/small world <i>Animals and their habitat</i> Creating minibeast habitats Minibeasts, wood, pebbles, plants, soil Workshop Area <i>Forces</i> Creating habitats and minibeasts using a variety of media</p>

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

A bespoke scheme of learning for Science

<p>To explore the natural world around them, making observations and drawing pictures of animals and plants;</p>	<p>To know that bees, wasps, ants, beetles, earwigs, flies, lacewings, snails, slugs, woodlice, millipedes, centipedes, harvestmen, spiders, worms, caterpillars, butterflies, are minibeasts that can be found in our woodland.</p> <p>To know that insects have 6 legs, segmented bodies (2 parts) and one or two pairs of wings.</p> <p>To know other body-parts of minibeasts include</p> <p>legs body head antennae shell pedipalp (spiders) spinnerette (spiders)</p>	<p>Collect and observe insects /minibeasts that live in our woodland habitat</p>	<p>OUTDOOR Math Shed/Area <i>Mass / comparing and classifying</i> Scales - objects for weight/balancing Ladybird and bee activities Ordering objects and numbers Counting in 2's and 10's Music Area <i>Sound</i> minibeast CD Percussion Instruments Scarves, pom poms Ribbons, claves, Construction Area <i>Forces</i> Inter Star Stickle Bricks Water Area <i>Animals and their habitat/protecting the environment</i> Under the sea theme Sea creatures, shells, pebbles, seaweed, divers Play tray/small world <i>Animals and their habitat / carnivore herbivore</i> dinosaur Land</p>
<p>To understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>	<p>To know that all living things have a life cycle.</p> <p>To know that living things are born, they grow up and have babies of their own - this is a life cycle.</p> <p>To know that some living things have different stages in their life cycle.</p> <p>To know that adult butterflies lay eggs, caterpillars hatch from the eggs, then the caterpillar forms a pupa/chrysalis, after 7-10 days a butterfly comes out of the</p>	<p>Life cycles of frogs and butterflies</p> <p>Water area: Wetlands/pond/life cycles</p>	<p>Small dinosaurs Pebbles, plants, soil, sand, artificial grass, Gravel Construction Area <i>Materials / Forces / Rocks and soils</i> Weight and Capacity Metal and wood containers, jugs, scoops, spades, rakes, large black buckets, wheelbarrows Wheeled resources and track <i>Forces / speeding up and slowing down</i> scooters, go-kart, tandem, rickshaw, body boards, loopies Discovery Area <i>Animals and their habitat / plants</i> gardening equipment Trowels, rakes, forks, plant pots Aprons, gloves</p>

A Scheme of Work designed to make our school a vibrant learning community where all pupils are successful learners. Learners who are valued and able to thrive. It is designed to engage pupils and motivate them to learn. It is challenging and inspirational, with meaningful outcomes and clearly defined end points, but allows flexibility, to ensure all pupils receive a broad, balanced curriculum and prepares pupils for the next stage of their education and for life in modern Britain and beyond.

	<p>pupa/chrysalis, then the butterfly lays eggs of its own.</p> <p>To know that adult frogs lay eggs called frog spawn; tadpoles hatch out of the frog spawn, after a few days they grow legs and their tail disappears; they can now leave the water and breathe on land. When they become adults they will lay eggs of their own.</p>		<p>Magnifying glasses, bug catchers, minibeast fact cards Habitat Making</p>
--	---	---	--