



Science – Progression in Knowledge, Scientific Enquiry and Vocabulary

EYFS	Autumn One What is happening around me outside in Autumn? <u>I wonder what makes me special ? FS1</u> I wonder how I can keep healthy ? Fs2	Autumn Two <u>I wonder why the leaves are changing and falling down?</u> What is happening around me outside in Autumn? FS1 and 2 How do I make light/how do I get shadows? FS2 as part of celebrations	Spring One <u>I wonder why it's so cold ?</u> What is happening around me outside in Winter? What is it like to live in a place that is frozen? FS2	Spring Two I wonder why the leaves are growing again and daffodils are growing ? FS2 How does the weather affect animals and plants? <u>I wonder what will grow ? FS1</u>	Summer One I wonder what a mini beast is ? FS1 I wonder what lives in the woods ? (layers trees, ground, in the soil) FS2	Summer Two I wonder where in the world I can travel to ? FS2 What lives in a rockpool? (FS2) animals and habitats I wonder why its so hot ? I wonder what things will go ? FS1 forces
Key enquiries FS1	TNW- Talk about changes they see: Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary.	TNW- Talk about changes they see: Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Continuous provision area- materials sorted and grouped Talk about what they see using a wide vocabulary.	TNW- Talk about changes they see: Use all their senses in hands-on exploration of natural materials Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary.	Plant seeds and care for growing plants. (TNW 3-4) Understand the key features of the life cycle of a plant and an animal.	Begin to understand the need to respect and care for the natural environment and all living things. Explore and talk about different forces they can feel. Use all their senses in hands-on exploration of natural materials- wood and materials in forest school Explore collections of materials with similar and/or different properties.	Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Explore and talk about different forces they can feel. <ul style="list-style-type: none"> - Wind, pushes and pulls - light/shadow
Sticky Knowledge FS1	Know the leaves change colour and fall down Know we can collect some seeds- conkers/ acorns Know we may change our clothes in autumn Name and describe parts of the body	Know that things are made from <ul style="list-style-type: none"> - Wood - plastic - Fabric - Metal - glass - Natural e.g. rock, shell 	Know that the weather gets colder Know we can play in snow Know we may change our clothes in winter	Know animal names and baby animal names Describe the life cycle of a chick (egg, hatch, chick, chicken) Know that plants need: Heat/sun Light Water	Know that they should not pick flowers Know that they should roll a log/stone back after looking for a mini beast Know that natural materials feel different to one another	Know that the when light from the sun is blocked, it makes a shadow Know that summer is a season Know that the sun shines more in the summer Know that the weather gets warmer



		<p>Know the leaves change colour and fall down</p> <p>Know we can collect some seeds- conkers/ acorns</p> <p>Know we may change our clothes in autumn and winter</p> <p>Know its is getting colder because it is winter</p>		<p>Know that some plants need soil to grow</p> <p>Know the names of the parts of a plant</p>	<p>know that they can smell things, e.g. the grass, the scent of the flowers.</p> <p>Know that they can use their ears to hear, e.g. birds, wind.</p> <p>Know that the wind pushing and pulling is a force</p>	<p>Know that you wear lighter clothes in summer e.g. shorts and t-shirt</p>
<p>Key enquiries FS2</p>	<p>UTW- Understand the effect changing seasons has on the world around them that in autumn:</p> <p>UTW- Explore the natural world around them.</p> <p>Describe what they see, hear and feel whilst outside.</p> <p>Say how they can be healthy – body and mind</p>	<p>UTW- Understand the effect changing seasons has on the world around them that in autumn and then onto Winter:</p> <p>UTW- Explore the natural world around them.</p> <p>Know how to create a Shadow</p> <p>Describe what they see, hear and feel whilst outside... shadows.</p>	<p>UTW- Understand the effect changing seasons has on the world around them that in winter:</p> <p>UTW- Explore the natural world around them.</p> <p>Describe what they see, hear and feel whilst outside.</p>	<p>UTW- Understand the effect changing seasons has on the world around them that in winter:</p> <p>UTW- Explore the natural world around them.</p> <p>Describe what they see, hear and feel whilst outside.</p>	<p>UTW- Understand the effect changing seasons has on the world around them that in winter:</p> <p>UTW- Explore the natural world around them.</p> <p>Describe what they see, hear and feel whilst outside.</p> <p>Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter (ELG)</p>	
<p>Sticky Knowledge FS2</p>	<p>Know that it turns colder and the weather changes</p> <p>Know the trees change, leaves fall, things stop growing</p> <p>Know that animals begin to change their behaviours (prepare to hibernate NB continue autumn 2)</p> <p>Know that exercise and healthy eating make them healthy</p> <p>Identify parts of a healthy diet</p> <p>Know ways to be happy mental health</p>	<p>Know that it turns colder and the weather changes</p> <p>Know the trees change, leaves fall, things stop growing</p> <p>Know that animals begin to change their behaviours (prepare to hibernate NB continue autumn 2)</p> <p>I know what gives light</p> <ul style="list-style-type: none"> - Torch - The sun - Bulb <p>I know I get a shadow if I put something in front of the light and it blocks it</p>	<p>Know that it turns colder and the weather changes</p> <p>Know the trees change, leaves fall, things stop growing</p> <p>Know that animals begin to change their behaviours (prepare to hibernate NB continue autumn 2)</p> <p>Know how water can freeze and melt</p> <p>Explain how we know it is winter</p>	<p>Know that in Spring it turns warmer and the weather changes</p> <p>Know that things start to grow again because the weather is getting warmer</p> <p>Know that animals begin to change their behaviours, reproduce, return looking for food, build their homes</p>	<p>Know it is changing from spring to summer and the trees are growing again</p> <p>Know that animals are having babies and reproducing (nests and eggs)</p> <p>Know that we might see rainbows with the sun and the weather</p> <p>Know the names of some animals and their habitats and why they live there (in the woods, mini beasts)</p> <p>Know some similarities and differences between the</p>	<p>I wonder what will sink and what will float? (forces)</p> <p>Know why some things might sink/ float</p> <p>Know material names</p> <p>Know which materials would make a boat that floats</p>



			<p>Know the arctic where it is and how this environment differs from their own</p> <ul style="list-style-type: none"> - ice sheets - animals and their habitats there and how they are adapted to live there 		<p>natural world around them and contrasting environments, drawing on their experiences and what has been read in class (ELG)</p> <p>Know the features of a woodland and describe what might be in it</p>	
<p>Vocabulary</p> <p>FS1</p> <p>FS2</p>	<p>Leaves</p> <p>Conkers</p> <p>Nuts</p> <p>Trees</p> <p>Colours</p> <p>Autumn</p> <p>Winter</p> <p>Colder</p> <p>Clothes (scarf, hat, coat, gloves)</p> <p>Autumn</p> <p>Cold</p> <p>Wind</p> <p>Season</p> <p>Growth</p> <p>Hibernate</p>	<p>Leaves</p> <p>Conkers</p> <p>Nuts</p> <p>Trees</p> <p>Colours</p> <p>Autumn</p> <p>Winter</p> <p>Colder</p> <p>Clothes (scarf, hat, coat, gloves)</p> <p>Wood</p> <p>Plastic</p> <p>Glass</p> <p>Fabric/ material</p> <p>Rock</p> <p>Stone</p> <p>Shell</p> <p>Autumn</p> <p>Cold</p> <p>Wind</p> <p>Season</p> <p>Growth</p> <p>Hibernate</p>	<p>Material names</p> <p>Cold</p> <p>Weather</p> <p>Snow</p> <p>Ice</p> <p>Scarf</p> <p>Hat gloves coat</p> <p>Frost (expert)</p> <p>Winter</p> <p>Cold</p> <p>Ice</p> <p>Frost</p> <p>frozen</p> <p>Wind</p> <p>Season</p> <p>Growth</p> <p>Hibernate</p> <p>food</p> <p>Freeze, melt, ice, icicle, descriptive words for ice, temperature, zero, Iceberg</p> <p>Arctic animals (hare, wolf, polar bear, narwhal, owl, caribou)</p> <p>Camouflage</p> <p>Habitat</p> <p>Environment</p>	<p>Chick chicken egg hatch</p> <p>Seed</p> <p>Stem</p> <p>Leaf</p> <p>Grow</p> <p>Flower</p> <p>Sun</p> <p>Water</p> <p>Heat</p> <p>Light</p> <p>Spring</p> <p>Warmer</p> <p>Weather</p> <p>Showers</p> <p>Rainbows</p> <p>Season</p> <p>Growth</p> <p>food</p>	<p>Mini beast, Legs, Body, Feelers/antennae, mini beast names, wings, habitat, dark, damp, small space, look after/care, careful/ly, force, wind, move</p> <p>wood/bark, grass, leaves, daisies, dandelions, tree, blossom, ears, hands, eyes, nose, see, touch, hear smell/scent</p> <p>texture, rough, smooth, bumpy</p> <p>Life cycle, changes, grow, frogspawn, tadpole, froglet, frog, seed, soil, shoot, leaves, bud, flower, sunlight, water</p> <p>Summer</p> <p>New growth</p> <p>Some tree names – oak, birch</p> <p>Insect , Insect names, Woodlice, Ladybird, Worm, Beetle , Habitat (expert) , Environment (expert)</p>	<p>Travel</p> <p>Push</p> <p>Pull</p> <p>Down</p> <p>up</p> <p>Crab</p> <p>Shell</p> <p>Rock</p> <p>Rockpool</p> <p>Anemone</p> <p>light</p> <p>sun</p> <p>shade</p> <p>dark</p> <p>shadow</p> <p>blocked</p> <p>summer</p> <p>warm/er</p> <p>sun/sunnier</p> <p>clothes names</p> <p>Plastic</p> <p>Wood</p> <p>Metal</p>



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Whole School Curriculum Drivers: **Articulate, Confident, Resilient, Respectful, Responsible, Self-Aware**

Areas of learning- **Past and Present (PP), People, Cultures and Communities (PCC) , The Natural World (TNW), Communication and Language (CAL) runs throughout**

Characteristics of effective learning:

- **Playing and exploring** – Children investigate and experience things, and ‘have a go’.
- **Active learning** – Children concentrate and keep on trying if they encounter difficulties, and enjoy achievements.
- **Creating and thinking critically** – Children have and develop their own ideas, make links between ideas, and develop strategies for doing things.