

# Science Long Term Plan



|         | Autumn Term   |  | Spring Term  |   | Summer Term   |  |
|---------|---|--|--|---|---|--|
| Nursery | Why Am I Special?   | Why Are Leaves So Crispy?  | How Does That Building Stay Up?  | Are Eggs Alive?   | Why Do Spiders Eat Flies?   | How Many Colours in a rainbow?                                       |
|         | <p><b>Biology – Seasonal change</b></p> <p>Through general discussions about the weather as it occurs. (Throughout whole year)</p>                                    |  |  |   |   |  |
|         | <p><b>Physics – Materials</b><br/>Explore natural materials - sticks, stones, leaves (outdoor learning)</p> <p><b>Biology – Humans</b><br/>Explore their senses –</p> | <p><b>Biology – Humans</b><br/>Explore senses<br/>I can explore different objects –leaves, conkers, acorns etc. (touch/hearing)<br/>Explore light and dark/torches (sight)<br/>Popcorn/marshmallows, fire, (taste, smell)</p> <p><b>Biology – Plants /Habitats</b><br/>Begin to understand the need to respect and care for the natural environment. (Outdoor learning)</p> <p><b>Physics – Light and sound</b><br/>Explore their senses – light/dark<br/>Identify different sounds.</p> <p><b>Physics – Materials</b></p> | <p><b>Physics – Materials</b><br/>I can test and try different materials to make pig houses. I can see who can build the tallest tower and work out how to make it stronger.</p> | <p><b>Biology – Animals</b><br/>I can say some animals that come from eggs</p> <p><b>Biology – Plants /Habitats</b><br/><i>Plant seeds and care for growing plants, (cress)</i></p> | <p><b>Biology – Plants /Habitats</b><br/>Begin to understand the need to respect and care for the natural environment. (Outdoor learning)</p> <p><b>Biology – Animals</b><br/>I can find mini beasts I can use magnifying glasses and making bug hotels. I can watch how caterpillars turn into butterflies</p> | <p><b>Chemistry – Materials</b><br/>Making jelly – what happens?</p> |

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|           |   | Explore the different forces they can feel. - Linked to weather – puddle jumping, ice melting, frost, making windmills, kites on windy days  |   |  |  |   |
| Reception | Marvellous Me   | Let's Celebrate  | Once Upon a Time  | Things That Grow   | Quests and Journeys  | Oceans and Seas   |
|           | <p><b>Biology – Seasonal change</b></p> <p>How has the environment changed trees/ leaves, plants, weather, light/dark – simple changes to day length (dark when have breakfast/ tea in winter. In summer its still light at bedtime.</p> <p>(Every term)</p> <p>OBSERVATIONAL</p> |  |   |  |  |   |
|           | <p><b>Biology – Humans</b></p> <p>Our bodies – naming basic parts</p> <p>Same/different</p> <p>Keeping healthy – germs/ food</p> <p>SORTING AND CLASSIFYING</p>   | <p><b>Biology – Animals</b></p> <p>Animals Nocturnal</p> <p>SORTING AND CLASSIFYING</p> <p><b>Physics –</b></p> <p><b>Light and sound</b></p> <p>Exploring torches/dark areas/shadows/different colours/shadow puppets</p> <p>Which clothes are good to be seen in the dark?</p> | <p><b>Physics – Materials</b></p> <p>What materials are good to make bridges with?</p> <p>TESTING</p> | <p><b>Biology – Plants /Habitats</b></p> <p>How do plants grow – beans, peas, sunflowers</p> <p>MEASUREMENT</p> <p>OBSERVE OVER TIME.</p> <p>Label parts of a plant. (UW- purple mash – drag and drop.</p> <p>Cut and stick</p> <p><b>Biology – Animals</b></p> <p>Farm animals – naming offspring, lamb, calf, foal, chick, piglet, kid, kitten, puppy. – link Rushall farm. (Spring 2)</p> <p>SORTING AND CLASSIFYING/ OBSERVATION</p> | <p><b>Biology – Plants /Habitats</b></p> <p><b>Biology – Animals</b></p> <p>Habitats and mini beasts</p> <p>Noticing patterns in nature.</p> <p>SORTING AND COMPARING/ OBSERVATIONS.</p> | <p><b>Physics – Materials</b></p> <p>Floating and sinking.</p> <p>TESTING</p> |

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|--------|--|--|--|---|---|---|
| Year 1 | Toys   | Fairy Tales and Forests  | To Infinity and Beyond   | Animals Around the World  | Dinosaurs   | London  |
|        | <p><b>Biology – Seasonal change</b></p> <p>Throughout seasons linked to class trees – through outdoor learning.</p>  |  |  |   |   |   |
|        | <p><b>Biology – Humans</b></p> <p>Body parts – extended to some internal organs<br/>Linking body parts to senses.<br/>INVESTIGATE -touch/memory</p>  | <p><b>Physics – Materials</b></p> <p>Identify materials – talk about properties.<br/>RECORD TALLY CHART<br/>INVESTIGATE – magnets/metals<br/>Waterproof.</p>                 | <p><b>Biology – Plants /Habitats</b></p> <p>OBSERVATION OVER TIME – weather/temperature<br/>RECORD temp<br/>SORT/CLASSIFY trees deciduous/evergreen<br/>Name flowers<br/>DRAW AND LABEL parts of trees</p> | <p><b>Biology – Animals</b></p> <p>SORT AND CLASSIFY<br/>Animals by type e.g mammals. etc<br/>Label body parts<br/>COMPARE animals' different places.<br/>Name adult animals and offspring.<br/>(Ewe, ram, lamb)<br/>INVESTIGATE – camouflage</p> | <p><b>Biology – Animals</b></p> <p>SORT/ VENN DIAGRAM<br/>Dinosaurs – carnivore, herbivore...etc<br/>Name parts of dinosaur –<br/>COMPARE (teeth)<br/>INVESTIGATE – who's poo?</p>    | <p><b>Biology – Plants /Habitats</b></p> <p>OBSERVE OVER TIME<br/>Rainfall and temp.<br/>RECORD rainfall.<br/>Talk about how tree has changed throughout the year.<br/>COMPARE – weather from a different country</p> |
| Year 2 | Towers, Tunnels and Turrets  | Winter Wonderland  | Muck, Mess and Mixtures  | The Scented Garden  | Wriggle and Crawl   | The Age of Discovery  |
|        | <p><b>Biology – Seasonal change</b></p> <p>Autumn 1/ Spring 1/ Summer 1</p> <p>Visit class area – record changes throughout the year, linked to plants, trees and animals. (outdoor learning)</p>              |  |  |   |   |   |
|        | <p><b>Physics – Materials</b></p> <p>Choosing materials linked to suitability for a purpose.<br/>INVESTIGATE.</p> <p><b>Chemistry – Materials</b></p> <p>How to change materials by force/ twisting... etc</p> | <p><b>Biology – Humans</b></p> <p>RECORD and MEASURE<br/>Their height.<br/>What do humans need to survive?<br/>How to stay healthy – linked to exercise.<br/>INVESTIGATE</p> | <p><b>Physics – Materials</b><br/><b>Chemistry – Materials</b></p> <p>INVESTIGATE – what's stickier?</p>   | <p><b>Biology – Plants /Habitats</b></p> <p>RECORD AND OBSERVE<br/>- Planting bulbs.<br/>Identify and naming flowers. – extending vocab.<br/>INVESTIGATION – seeds</p>  | <p><b>Biology – Animals</b></p> <p>SORTING AND CLASSIFYING–<br/>Alive, dead, never been alive<br/>Food chains.<br/><br/>How are animals suited to their habitats – microhabitats.</p> | <p>Recall and revise topics from the year.</p>  |

