

### Science Curriculum Map 2022-23

|               | Nursery   | Reception  | Year 1   | Year 2  |
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| <b>Autumn</b> | <p><b>Nursery Rhymes / Celebrations</b><br/>                     Local walk for signs of Autumn<br/>                     Using magnifiers to search for insects<br/>                     Looking at ladybirds, life cycles<br/>                     Facts about spiders – what makes them special, why people are scared of them<br/>                     Harvest<br/>                     Day and night<br/>                     Weather<br/>                     Science Week – Handa’s Surprise<br/>                     Feel, taste and smell the fruit from the story. Which animals ate which fruit?<br/>                     Cosmic yoga and excise circuit to raise the heartbeat. Move like the story animals.</p> | <p><b>Three Little Pigs</b><br/>                     Facts about pigs and wolves<br/>                     Habitats of pigs and wolves<br/>                     Wolf breath – 3 Little Pigs house prediction<br/>                     What changes and growth are happening in the natural world Autumn walk with iPads<br/>                     Autumn colour tissue paper trees<br/>                     Seasons of the year<br/>                     Healthy eating, cleaning teeth, washing hands<br/>                     Mouldy bread investigation</p> | <p><b>Ourselves / Senses / The Natural World</b><br/>                     To learn that we have five senses which allow us to find out about and develop a greater understanding of the world.<br/>                     To know which body part relates to each sense.<br/>                     To learn that humans have bodies with similar parts, and to learn the body part names.<br/>                     To make observations and comparisons of height and their bodies<br/>                     To collect and organise data and present it in a chart<br/>                     To make a prediction and draw conclusions from an investigation<br/> <b>Seasonal changes</b><br/>                     To observe changes across the four seasons and the weather associated with autumn<br/>                     To explore the natural world in the school’s nature area<br/> <b>Animals</b><br/>                     To Identify and name a variety of common animals, including fish, amphibians, reptiles, birds and mammals.<br/>                     To identify and name a variety of common animals that are carnivores, herbivores and omnivores.<br/>                     To describe and compare the structure of a variety of common animals.<br/> <b>Forest School/Woodland Trust activities</b></p> | <p><b>Animal including humans</b><br/>                     Grouping foods and the healthy food plate<br/>                     How to care for a baby<br/>                     Importance of exercise and types of exercise<br/>                     Importance of dental hygiene<br/>                     Health and hygiene including washing hands and hair, keeping clean, germ<br/>                     Investigate the effect of different substances on our teeth<br/>                     Investigate how the weather changes across the seasons and isn’t defined by the season – focus on rain</p> |

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| <p><b>Spring</b></p> | <p><b>Jungle Animals / Growing</b><br/>         Comparing the local environment to a jungle environment<br/>         Signs of winter<br/>         Facts about hibernating creatures.<br/>         Tasting Chinese food using chopsticks<br/>         Spring walk to look for signs of new life<br/>         Sowing cress seeds – life cycles<br/>         Egg Investigation<br/>         New life: lambs</p>                  | <p><b>The Gingerbread Man</b><br/>         Ingredients for gingerbread man – separately and when combined Smelling spices<br/>         Gingerbreadman in oil, water and milk<br/>         Signs of winter and spring<br/>         Planting seeds<br/>         Materials<br/>         Snow and ice investigation<br/>         Ice skating penguins</p>   | <p><b>Animals, including humans</b><br/>         To identify and name a variety of common animals with a focus on birds.<br/>         RSPB Bird Watch<br/>         Migration<br/>         Diets and making bird feeders<br/> <b>Seasonal changes</b><br/>         To observe changes across the four seasons with a focus on winter<br/>         To observe and describe weather associated with the seasons and how day length varies. Use iPads and Logiboxes to take photos and temperature readings<br/>         Weekly weather chart<br/>         Rain investigation<br/> <b>Everyday Materials</b><br/>         To distinguish between an object and the material it is made from.<br/>         To identify and name a variety of everyday materials including wood, plastic, glass, metal, water and rock.<br/>         To describe the simple physical properties of a variety of everyday materials.<br/>         To compare and group together a variety of everyday materials on the basis of their simple physical properties.<br/>         Umbrella investigation<br/> <b>Forest School/Woodland Trust activities</b></p> | <p><b>Materials</b><br/>         Identify materials and their properties (including wood, metal, plastic, glass, brick, rock, paper and cardboard)<br/>         Compare suitability of materials by packing a rucksack to take to Antarctica (including wood, metal, plastic, glass, brick, rock, paper and cardboard)<br/>         Frostbite investigation – which material is most suitable to prevent frostbite?<br/>         What effect is plastic having on our oceans? Why is it important to reuse and recycle?<br/>         Research invention of new materials e.g. Charles Martin Hall (aluminium) – using different resources to conduct research.<br/>         Investigate how the weather changes across the seasons and isn't defined by the season – focus on rain<br/> <b>Plants</b><br/>         Growing seeds and bulbs (nasturtium seeds, narcissus bulbs) including planting, care, observation and description of growth:<br/>         - growth investigation (effect of water / no water, light / no light, hot / cold temperature)<br/>         - seed / bulb diaries<br/>         - plant survival in Antarctica / Native America</p> |
| <p><b>Summer</b></p> | <p><b>Sand / Water</b><br/>         Signs of summer &amp; seasonal facts<br/>         What you can find in a pond<br/>         What you can find in a rock pool<br/>         Compare the local environment to a seaside environment<br/>         Floating and sinking<br/>         Uses of water<br/>         Sorting sea and river creatures<br/>         Frozen and melted<br/>         Investigating wet/dry/damp sand</p> | <p><b>The Little Red Hen</b><br/>         Facts about hens and chicks<br/>         Life Cycle of a chick<br/>         Observations of chicks hatching and growing<br/>         Seed dispersion 'The Tiny Seed' by Eric Carle<br/>         Tasting bread from European countries<br/>         Harvesting crops long ago Investigating seeds using magnifying glasses<br/>         Planting seeds and herbs</p> | <p><b>Seasonal Change</b><br/>         Variation of length of the day<br/>         Identify changes in trees and clothing worn from spring to summer<br/> <b>Seasonal weather</b><br/>         Use iPads and Logiboxes to take photos and temperature readings<br/>         Weekly weather chart<br/>         Staying safe in the sun<br/> <b>Growing and Lifecycles</b><br/> <b>Plants</b></p>  | <p><b>Habitats</b><br/>         Learn that there are different kinds of plants and animals in the immediate environment and to treat animals and the environment with care and sensitivity<br/>         Recognise hazards in working with soil<br/>         Observe and make a record of animals and plants found<br/>         Present results in a variety of ways including in a table</p>   |

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|  | <p>Frog life cycle</p> | <p>Nature table -signs of spring and summer<br/>         Floating and sinking<br/>         Facts about windmills</p> | <p>To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees<br/>         To identify and describe the basic structure of a variety of common flowering plants, including trees<br/>         To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees<br/>         To identify and describe the basic structure of a variety of common flowering plants, including trees.<br/> <b>The Weather</b><br/>         To observe changes across the four seasons. Focus: Summer<br/>         To observe and describe weather associated with the seasons and how day length varies<br/> <b>Forest School/Woodland Trust activities</b></p> | <p>Learn that there are differences between local habitats<br/>         To make predictions about the animals and plants found in different local habitats and to investigate these<br/>         Use drawings to present results and make comparisons saying whether their predictions were supported<br/>         Learn that flowering plants produce seeds. To turn ideas of their own, about what plants need to begin to grow, into a form that can be tested.<br/>         Observe and make a day-by-day record of observations<br/>         Use the results to draw a conclusion about what seeds need to begin to grow and decide whether this is what they expected<br/>         Learn that seeds produce new plants<br/>         Garden / pond/ churchyard</p> |
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