

Whole School Long Term Plan: Science

Year B 2020- 2021	Autumn	Spring	Summer
<p>Year R EYFS</p>	<p>All about me, my wishes and dreams</p> <ul style="list-style-type: none"> <li>- Changes since birth</li> <li>- What makes us unique? Eye, hair, skin colour, fingerprints.</li> <li>- Signs of Autumn</li> </ul> <p>Celebrations and Festivals</p> <ul style="list-style-type: none"> <li>- A World of Colour</li> <li>- Signs of Winter</li> <li>- Freezing</li> </ul>	<p>People Who Help Us</p> <ul style="list-style-type: none"> <li>- Similarities and differences between ourselves and others</li> <li>- 5 senses</li> <li>- Signs of Spring</li> <li>- Changes of state (making slime)</li> <li>- Friction/gravity (using ramps)</li> </ul> <p>Once Upon a Time, Spring and Easter</p> <ul style="list-style-type: none"> <li>- Observations of animals</li> <li>- Herbivores/carnivores</li> <li>- Freezing and melting</li> </ul>	<p>Growing, Lifecycles and In the Garden</p> <ul style="list-style-type: none"> <li>- Life cycles</li> <li>- Growing plants</li> <li>- Sorting and classifying insects</li> <li>- Caring for the environment</li> </ul> <p>Oh I Do Like to be Beside the Seaside!</p> <ul style="list-style-type: none"> <li>- Floating and sinking</li> <li>- Recycling</li> </ul>
<p>Year 1 &amp; 2</p>	<p>Weather Patterns (Y1)</p> <ul style="list-style-type: none"> <li>- Seasonal weather and daily weather</li> <li>- Forecasts</li> <li>- World weather</li> <li>- Polar weather</li> <li>- Equatorial regions</li> </ul> <p>Plants (Y1)</p> <ul style="list-style-type: none"> <li>- Identify and name common wild and garden plants</li> <li>- Identify the basic structure of common flowering plants incl. trees</li> </ul>	<p>People and Pets (Y1)</p> <ul style="list-style-type: none"> <li>- Identify and name common animals incl. fish, amphibians, reptiles, birds and mammals</li> <li>- Identify common animals that are carnivores, herbivores and omnivores</li> </ul> <p>Living things (Y2)</p> <ul style="list-style-type: none"> <li>- Differences between living, dead and never been alive</li> <li>- Food chains</li> <li>- Classifying animals</li> </ul>	<p>Habitats and homes</p> <ul style="list-style-type: none"> <li>- Animals and habitats</li> <li>- How the habitat suits the animal</li> <li>- Types of habitat</li> <li>- Micro-habitat</li> </ul> <p>Properties of materials – seaside objects (Y1) (sorting and classifying)</p> <ul style="list-style-type: none"> <li>- Explore materials that seaside objects might be made from</li> <li>- Squash, bend, twist, stretch</li> </ul>

<p style="text-align: center;">Year 3 &amp; 4</p>	<p><b>Rocks, soils and fossils (Y3)</b></p> <ul style="list-style-type: none"> <li>- Types of rock</li> <li>- Properties of rock</li> <li>- Fossil formation</li> <li>- Mary Anning</li> <li>- Soil investigation</li> </ul> <p><b>Teeth/digestive system/food chains (Y4)</b></p> <ul style="list-style-type: none"> <li>- Investigate digestive system</li> <li>- Types and functions of teeth</li> <li>- Tooth decay investigation</li> </ul>	<p><b>States of Matter (Y4)</b></p> <ul style="list-style-type: none"> <li>- Investigate gas/liquid/solid</li> <li>- Water cycle</li> </ul> <p><b>All Living Things (Y4)</b></p> <ul style="list-style-type: none"> <li>- Grouping and classifying</li> <li>- Vertebrates</li> <li>- Invertebrates</li> <li>- Habitat survey</li> </ul>	<p><b>Habitats</b></p> <ul style="list-style-type: none"> <li>- Local and wider environment</li> <li>- Danger posed to living things by changes in the environment</li> </ul> <p><b>Plants (Y3)</b></p> <ul style="list-style-type: none"> <li>- Parts of plants</li> <li>- What a plant needs to grow/survive</li> <li>- Water transportation</li> </ul>
<p style="text-align: center;">Year 5 &amp; 6</p>	<p><b>Properties and changes of materials (Y5)</b></p> <ul style="list-style-type: none"> <li>- thermal conductors and insulators</li> <li>- electrical conductors</li> <li>- dissolving</li> <li>- separating mixtures</li> <li>- irreversible changes</li> </ul> <p><b>Forces (Y5)</b></p> <ul style="list-style-type: none"> <li>- Identify forces acting on objects</li> <li>- Explore gravity</li> <li>- Air resistance</li> <li>- Water resistance</li> <li>- Friction</li> <li>- mechanisms</li> </ul>	<p><b>Earth and Space (10 week unit) (Y5)</b></p> <ul style="list-style-type: none"> <li>- Spherical bodies</li> <li>- Planets</li> <li>- Geocentric Versus Heliocentric</li> <li>- Night and day</li> <li>- Movement of the moon</li> </ul>	<p><b>All living things (Y5) (Lifecycles)</b></p> <ul style="list-style-type: none"> <li>- plant reproduction</li> <li>- life cycles of mammals</li> <li>- metamorphosis</li> </ul> <p><b>All living things (Y6) (Classification)</b></p> <ul style="list-style-type: none"> <li>- classifying animals</li> <li>- Linnaean system</li> <li>- Micro organisms</li> </ul>

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Year A 2021 - 2022	Autumn	Spring	Summer
<p>Class 1 Year R EYFS</p>	<p>All about me, my wishes and dreams</p> <ul style="list-style-type: none"> <li>- Changes since birth</li> <li>- What makes us unique? Eye, hair, skin colour, fingerprints.</li> <li>- Signs of Autumn</li> </ul> <p>Celebrations and Festivals</p> <ul style="list-style-type: none"> <li>- A World of Colour</li> <li>- Signs of Winter</li> <li>- Freezing</li> </ul>	<p>People Who Help Us</p> <ul style="list-style-type: none"> <li>- Similarities and differences between ourselves and others</li> <li>- 5 senses</li> <li>- Signs of Spring</li> <li>- Changes of state (making slime)</li> <li>- Friction/gravity (using ramps)</li> </ul> <p>Once Upon a Time, Spring and Easter</p> <ul style="list-style-type: none"> <li>- Observations of animals</li> <li>- Herbivores/carnivores</li> <li>- Freezing and melting</li> </ul>	<p>Growing, Lifecycles and In the Garden</p> <ul style="list-style-type: none"> <li>- Life cycles</li> <li>- Growing plants</li> <li>- Sorting and classifying insects</li> <li>- Caring for the environment</li> </ul> <p>Oh I Do Like to be Beside the Seaside!</p> <ul style="list-style-type: none"> <li>- Floating and sinking</li> <li>- Recycling</li> </ul>
<p>Class 2 Year 1 &amp; 2</p>	<p>Amazing Me!</p> <ul style="list-style-type: none"> <li>- Investigating Senses</li> <li>- Changes over time</li> </ul> <p>Seasonal Changes (Y1)</p> <ul style="list-style-type: none"> <li>- Explore seasons and the weather associated</li> <li>- Investigate rainfall</li> <li>- Compare seasons</li> <li>- Animals in different seasons</li> <li>- Day length</li> </ul>	<p>Animals including humans (Y2)</p> <ul style="list-style-type: none"> <li>- Animals have offspring that grow into adults</li> <li>- Basic needs of animals for survival</li> <li>- Importance of exercise eating the right food and hygiene</li> </ul> <p>The Environment</p> <ul style="list-style-type: none"> <li>- Climate change</li> <li>- Recycling</li> <li>- Endangered animals</li> </ul>	<p>Plants (Y2)</p> <ul style="list-style-type: none"> <li>- What plants need to grow and thrive</li> <li>- Plant life cycles</li> </ul> <p>Uses of everyday materials (Y1 &amp; Y2) (investigating and problem solving)</p> <ul style="list-style-type: none"> <li>- Properties of materials including wood, plastic, metal, glass, fabric and their uses</li> <li>- Investigate which materials are best for which problems</li> </ul>

<p style="text-align: center;"><b>Class 3</b> <b>Year 3 &amp; 4</b></p>	<p style="text-align: center;"><b>Motions and Forces (Y3)</b></p> <ul style="list-style-type: none"> <li>- Surface friction</li> <li>- Forces</li> <li>- Magnets</li> </ul> <p style="text-align: center;"><b>Electricity (Y4)</b></p> <ul style="list-style-type: none"> <li>- Generation of electricity</li> <li>- Complete/incomplete circuits</li> <li>- Conductors and insulators</li> <li>- Investigate switches</li> </ul>	<p style="text-align: center;"><b>Light (Y3)</b></p> <ul style="list-style-type: none"> <li>- Light/dark</li> <li>- Reflection</li> <li>- Mirrors</li> <li>- Sun safety</li> <li>- shadows</li> </ul> <p style="text-align: center;"><b>Sound (Y4)</b></p> <ul style="list-style-type: none"> <li>- Explain sound sources</li> <li>- Sound travel</li> <li>- Pitch</li> <li>- Absorbing sound</li> <li>- Musical instruments</li> </ul>	<p style="text-align: center;"><b>Animals including humans: nutrition/skeletons &amp; muscles (Y3)</b></p> <ul style="list-style-type: none"> <li>- Types of nutrition</li> <li>- Types of skeleton</li> <li>- Functions of a skeleton &amp; muscles</li> </ul> <p style="text-align: center;"><b>Plants</b></p> <ul style="list-style-type: none"> <li>- Pollination</li> <li>- Flowers</li> <li>- Bees</li> <li>- seeds</li> </ul>
<p style="text-align: center;"><b>Class 4</b> <b>Year 5 &amp; 6</b></p>	<p style="text-align: center;"><b>Animals including Humans (Y6) (Heart, blood &amp; diet)</b></p> <ul style="list-style-type: none"> <li>- circulatory system</li> <li>- transporting water and nutrients</li> <li>- diet and exercise</li> <li>- impact of drugs and alcohol</li> </ul> <p style="text-align: center;"><b>Light (Y6) (Behaviour of light &amp; sight)</b></p> <ul style="list-style-type: none"> <li>- how we see</li> <li>- reflection</li> <li>- refraction</li> <li>- exploring prisms and colour</li> </ul>	<p style="text-align: center;"><b>Electricity (Y6)</b></p> <ul style="list-style-type: none"> <li>- circuit symbols</li> <li>- effects of volts</li> <li>- investigations</li> </ul> <p style="text-align: center;"><b>Evolution and inheritance (Y6) (Adaptation)</b></p> <ul style="list-style-type: none"> <li>- Inheritance</li> <li>- Adaptation</li> <li>- Evolution</li> <li>- Evidence for evolution</li> <li>- Darwin</li> </ul>	<p style="text-align: center;"><b>Animals, including humans (Y5) (Changes from birth)</b></p> <ul style="list-style-type: none"> <li>- stages of human development</li> <li>- gestation periods</li> <li>- life expectancy</li> </ul> <p style="text-align: center;"><b>Science of sport</b></p> <ul style="list-style-type: none"> <li>- combination of units</li> </ul>