



# Harrow Lodge Primary School

## Science Long Term Plan 2021-2022



	Autumn		Spring		Summer	
EYFS	<b>Me and My Community</b> <ul style="list-style-type: none"> <li>Human life cycle</li> <li>Exploring and investigating everyday materials</li> </ul>	<b>Once Upon a Time</b> <ul style="list-style-type: none"> <li>Investigating bubbles</li> <li>Healthy Eating</li> </ul>	<b>Starry Night</b> <ul style="list-style-type: none"> <li>Difference between day and night</li> <li>Importance of sleep</li> <li>Nocturnal animals</li> </ul>	<b>Dangerous Dinosaurs</b> <ul style="list-style-type: none"> <li>Animals millions of years ago</li> <li>Volcanoes</li> <li>Animals now and then</li> </ul>	<b>Sunshine and Sunflowers</b> <ul style="list-style-type: none"> <li>Lifecycle of a plant/stick insect</li> <li>Weather</li> <li>Labelling a plant</li> <li>Growing</li> <li>Recipes-herbs</li> <li>Shadows</li> </ul>	<b>Big Wide World</b> <ul style="list-style-type: none"> <li>Weather around the world</li> <li>Sinking and floating</li> </ul>
Year 1	<b>Everyday Materials</b> <ul style="list-style-type: none"> <li>Materials properties</li> <li>Textures</li> <li>Testing materials</li> <li>Grouping and labelling</li> </ul>	<b>Human Senses</b> <ul style="list-style-type: none"> <li>Mammals</li> <li>humans</li> <li>Body parts</li> <li>Senses</li> <li>Keeping safe</li> </ul>	<b>Seasonal changes</b> <ul style="list-style-type: none"> <li>Seasons</li> <li>Seasonal changes in deciduous and evergreen trees</li> <li>Seasonal changes in animals</li> <li>Weather, Seasonal weather</li> <li>Day length</li> <li>Measuring wind, temperature and precipitation</li> <li>Weather forecasting</li> </ul>		<b>Plant Parts</b> <ul style="list-style-type: none"> <li>Seasonal changes in plants</li> <li>Identifying plants</li> <li>Plant parts and diagrams</li> <li>Seeds, bulbs, leaves</li> </ul>	<b>Animal Parts</b> <ul style="list-style-type: none"> <li>Amphibians</li> <li>Reptiles</li> <li>diet</li> <li>Mammals</li> <li>Invertebrates</li> <li>Common structures</li> </ul>
Year 2	<b>Human Survival</b> <ul style="list-style-type: none"> <li>Basic needs for survival</li> <li>Importance of exercise</li> <li>Nutrition</li> <li>Hygiene</li> <li>Offspring to adulthood</li> </ul>	<b>Habitats</b> <ul style="list-style-type: none"> <li>What habitats provide</li> <li>Explore local habitats</li> <li>Identify and name living things</li> <li>Food and shelter</li> </ul>	<b>Uses of materials</b> <ul style="list-style-type: none"> <li>Identifying materials and their properties</li> <li>Shaping materials</li> <li>Linking properties to use</li> <li>Sustainability and recycling</li> </ul>	<b>Plant Survival</b> <ul style="list-style-type: none"> <li>Plant parts</li> <li>Seasonal changes in plants</li> <li>Investigating germination</li> <li>Investigating plant growth</li> <li>Unusual plants</li> </ul>	<b>Animal Survival</b> <ul style="list-style-type: none"> <li>Life cycles</li> <li>Survival of the human</li> <li>Basic needs for animals survival</li> </ul>	
Year 3	<b>Skeletal and muscular systems</b> <ul style="list-style-type: none"> <li>Importance of nutrition</li> <li>The role of the skeleton</li> <li>The role of the muscles</li> <li>Identify animals with different skeletons</li> </ul>		<b>Forces and magnets</b> <ul style="list-style-type: none"> <li>Pushing and pulling forces</li> <li>Contact and non-contact forces</li> <li>Friction</li> <li>Magnetism</li> <li>Magnetic attraction and repulsion</li> <li>Magnetic fields and magnetic properties</li> <li>Magnetic Earth</li> <li>Uses of friction and magnetism</li> </ul>		<b>Plant nutrition and reproduction</b> <ul style="list-style-type: none"> <li>Plants growth and survival</li> <li>Parts of a plant</li> <li>Functions of parts</li> <li>reproduction</li> </ul>	<b>Light and shadows</b> <ul style="list-style-type: none"> <li>light and dark</li> <li>reflection</li> <li>shadows</li> <li>data collection</li> <li>risks associated with the sun</li> </ul>

Year 4	<p><b>Digestive system</b></p> <ul style="list-style-type: none"> <li>• Digestive system</li> <li>• Mouth and teeth</li> <li>• Types of teeth and function</li> <li>• Animal's diets</li> <li>• Food chains</li> </ul>	<p><b>Sound</b></p> <ul style="list-style-type: none"> <li>• Vibrations</li> <li>• Pitch</li> <li>• volume</li> </ul>	<p><b>States of matter</b></p> <ul style="list-style-type: none"> <li>• Classifying solids, liquids and gases</li> <li>• Particle theory</li> <li>• Change of state- Melting, freezing, evaporation and condensation</li> <li>• States of water</li> <li>• Measuring temperature</li> <li>• Researching melting and boiling points</li> </ul>	<p><b>Grouping and classifying</b></p> <ul style="list-style-type: none"> <li>• Types of classification</li> <li>• Taxonomy</li> <li>• Classification keys</li> <li>• Animal kingdom and plant kingdom</li> <li>• Classifying new discoveries</li> </ul>	<p><b>Electrical circuits and conductors</b></p> <ul style="list-style-type: none"> <li>• Electrical appliances and safety</li> <li>• Simple series circuits; parts and functions</li> <li>• Switches, wires, cells</li> <li>• Conductors and insulators</li> <li>• Programmable devices</li> <li>• Design and make</li> </ul>	
Year 5	<p><b>Forces and mechanisms</b></p> <ul style="list-style-type: none"> <li>• Gravity</li> <li>• Air resistance</li> <li>• Water resistance</li> <li>• Friction</li> <li>• mechanisms</li> </ul>	<p><b>Earth and space</b></p> <ul style="list-style-type: none"> <li>• solar system</li> <li>• spherical bodies</li> <li>• movement of Earth, sun and moon</li> <li>• day and night- Earth's rotation</li> </ul>	<p><b>Human reproduction and ageing</b></p> <ul style="list-style-type: none"> <li>• Animal life cycles, including humans</li> <li>• Classifying mammals</li> <li>• Mammalian life cycles</li> <li>• Human sexual reproduction</li> <li>• Human ageing</li> </ul>		<p><b>Properties and changes of materials</b></p> <ul style="list-style-type: none"> <li>• Properties of materials and their uses</li> <li>• Separating mixtures</li> <li>• Sieving, filtration and evaporation</li> <li>• Reversible and irreversible changes</li> </ul>	
Year 6	<p><b>Circulatory System</b></p> <ul style="list-style-type: none"> <li>• Transport role of human circulatory system</li> <li>• Main parts of primary function</li> <li>• Healthy lifestyle choices</li> <li>• Effects of harmful substances</li> </ul>		<p><b>Electrical circuits and components</b></p> <ul style="list-style-type: none"> <li>• Series circuits</li> <li>• Circuit components</li> <li>• Recognised circuit symbols</li> <li>• Investigating circuit components</li> <li>• Electric current</li> <li>• Voltage – researching cells and batteries;</li> <li>• Investigating voltage changes</li> </ul>		<p><b>Light Theory</b></p> <ul style="list-style-type: none"> <li>• Light travelling in straight lines</li> <li>• Light travelling into the eye</li> <li>• Light and colour</li> <li>• Shadows, reflection and refraction</li> </ul>	<p><b>Evolution and Inheritance</b></p> <ul style="list-style-type: none"> <li>• Change over time</li> <li>• Fossils</li> <li>• Characteristics from parents to offspring</li> <li>• Variation</li> <li>• Adaptation</li> <li>• evolution</li> </ul>