

## Hilgay Riverside Academy - Science Curriculum - Long Term Plan

Phase	Cycle	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
EYFS	A/B	Space Growing and changing The Natural World					
KS1	Year A	<u>The Human Body</u> Animals, including humans, survival and offspring The Skeletal System, The Muscular System and Exercise The Digestive system and Healthy Eating The Circulatory system Germs, diseases and preventing illness	<u>Living Things in their Environments</u> Dead or Alive What is a habitat? Rainforest and Desert habitats Meadow habitats Underground habitats	<u>Electricity</u> Introduction to Electricity Safety Exploring Circuits (A) Exploring Circuits (B) Investigating conductive and non-conductive materials	<u>Materials and Matter</u> Materials and their uses George de Mestral and Velcro Matter under the microscope Changing Solid Objects Liquids and their properties	<u>Plants (1)</u> What plants need Parts of plants Seeds Deciduous and evergreen plants Plants we eat	
	Year B	<u>The Human Body</u> Introduction to Our	<u>Animals and their Needs</u>	<u>Materials and Magnets</u>	<u>Seasons and Weather</u>	<u>Plants (2)</u>	

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		<p>Body and Our Senses</p> <p>Eyes and Sight</p> <p>Ears and Hearing</p> <p>Touch, taste and smell</p> <p>Understanding Sensory Impairment</p>	<p>Amazing Animals</p> <p>Grouping animals: Fish, amphibians, reptiles, birds and mammals</p> <p>Grouping animals: carnivores, herbivores and omnivores</p> <p>Animals as pets</p> <p>Describing animals</p>	<p>Everyday Materials</p> <p>Properties of Materials</p> <p>Uses of Materials</p> <p>Magnets</p> <p>Investigation</p>	<p>The four seasons</p> <p>Tools to record the weather</p> <p>Using a graph to show information about the weather</p> <p>Clouds and what they tell us: cirrus, cumulus and stratus</p> <p>Weather forecasting</p>	<p>Plants around us</p> <p>Seeds and bulbs</p> <p>Comparative test 1</p> <p>Comparative Test 2</p> <p>Food and Farming</p>	
LKS2	Year A	<p><u>The Human Body</u></p> <p>Cells and Nutrients</p> <p>Teeth and Senses</p> <p>Digestion</p> <p>A Healthy Diet</p> <p>Vitamins and Minerals</p>	<p><u>Classification of Plants and Animals</u></p> <p>Introduction to classification</p> <p>Classes of vertebrates: Fish and Amphibians</p> <p>Classes of vertebrates: Reptiles, Birds and Mammals</p> <p>Classes of invertebrates: Insects, Arachnids and Molluscs</p>	<p><u>Light</u></p> <p>Light and Dark</p> <p>Transparent and opaque surfaces</p> <p>Mirrors and reflection</p> <p>Shadows</p> <p>Finding patterns in changing shadows</p>	<p><u>Sound</u></p> <p>What is sound?</p> <p>Speed of sound</p> <p>Qualities of sound – Pitch and Volume</p> <p>Human Voice</p> <p>Ears- how we hear</p>	<p><u>Electricity</u></p> <p>Electrical Safety</p> <p>Parts of a circuit</p> <p>Switches</p> <p>Thomas Edison and Lewis Latimer</p> <p>Investigating conductive and non- conductive materials</p>	

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			Classification of Plants				
	Year B	<u>The Human Body</u> The Muscular System The Skeletal System The Nervous System Preparing to Eat The Digestive System	<u>The Water Cycle</u> States of Matter Evaporation Condensation Precipitation The Water Cycle	<u>Ecology</u> Living things and Habitats Natural Cycles Web of Living Things Human Threats to the Environment Ecology in our Local Area	<u>Plants</u> Botany and Flowering Plants Requirements for life and growth Water transportation in plants Pollination in Flowering Plants Seed Dispersal	<u>Rocks</u> Sorting rocks How Rocks are Formed Permeability Fossils Soil	<u>Forces and Magnets</u> Forces (Gravity) Friction Magnet Magnetic Poles and Fields Investigating the strength of magnets
UKS2	Year A	<u>The Human Body</u> The Heart: Circulation of the Blood Blood Vessels and Transport Components of Human Blood Blood Pressure and Heart Rate and an investigation	<u>Classification of Living Things</u> Classifying organisms Cells: Plant and Animal cells Taxonomy Vertebrates Invertebrates	<u>Electricity</u> Simple Series Circuits Parallel Circuits Switches Planning an investigation	<u>Light</u> How light travels How we see Shadows and their shapes The Colour of Light Making a periscope	<u>Reproduction</u> Asexual reproduction Reproduction in non-flowering plants Reproduction in flowering plants Reproduction in animals Growth stages	<u>Evolution</u> Fossils and Evolution Inheritance Adaptation Charles Darwin Alfred Wallace
	Year B	<u>Materials</u>	<u>Forces</u>	<u>Astronomy</u>	<u>Living Things</u>	<u>Meteorology</u>	

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		<p>Properties of materials Which material is best? Solubility- which materials are most soluble/what solubility means Separating mixtures- sieving, filtering, evaporating Reversible changes- dissolving, mixing, change of state</p>	<p>Forces including gravity Air resistance, water resistance and friction Guided investigation: Paper Drop Guided investigation: Paper Drop Pulleys, gears and levers</p>	<p>The Big Bang and the expanding universe Gravity Our Solar System The Moon Our Galactic neighbourhood</p>	<p>Life cycles of plants and animals in our local area Reproduction in Plants Life cycles of Mammals and Amphibians Life cycles of insects and birds The work of David Attenborough and Jane Goodall</p>	<p>Meteorology and the Atmosphere The Ozone Layer Air Movement Cold and Warm Fronts Thunder and Lightning</p>	
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