

# Richard Avenue Primary School

## Long Term Plan – Science

	<b>AUTUMN</b>	<b>SPRING</b>	<b>SUMMER</b>			
<b>Nur</b>	<p>Knowledge &amp; Understanding of the World  <b>Topic- All about me</b>                      Topic- Toys</p>	<p>Knowledge &amp; Understanding of the World  <b>Topic- Transport/Healthy Living</b>  <b>Topic- Growing/Food</b></p>	<p>Knowledge &amp; Understanding of the World  <b>Topic- Minibeasts/Water</b>  <b>Topic- Animals/People Who Help Us</b></p>			
<b>Rec</b>	<p>Knowledge &amp; Understanding of the World  <b>Topic- All about me</b>                      Topic Toys</p>	<p>Knowledge &amp; Understanding of the World  <b>Topic- Transport/Healthy Living</b>  <b>Topic- Growing/Food</b>  <b>The world- Growth, Decay and changes over time</b></p>	<p>Knowledge &amp; Understanding of the World  <b>Topic- Minibeasts/Water</b>  <b>Topic- Animals/People Who Help Us</b></p>			
<b>Year 1</b>	<p><b>Chemistry</b>  <b>Everyday Materials</b>                      Objects/materials                      ID and name                      Describe properties                      Compare/group</p>	<p><b>Physics</b>  <b>Seasonal change (Taught across the year in line with seasons)</b>                      Observe changes across seasons                      Observe and describe weather/how day length varies</p>	<p><b>Biology</b>  <b>Animals, including humans</b>                      ID and name animals                      ID carn/omni/herb                      Describe and compare structure                      ID parts of the body/senses</p>	<p><b>Biology</b>  <b>Plants</b>                      ID name plants                      Basic structure of plants</p>		
<b>Year 2</b>	<p><b>Chemistry</b>  <b>Uses of Everyday materials</b>                      Suitability of materials for jobs                      Changing shapes of objects</p>	<p><b>Biology</b>  <b>Animals including humans</b>                      Animal offspring                      Basic needs                      Importance of exercise, balanced diet and hygiene</p>	<p><b>Biology</b>  <b>Living things and Habitats</b>                      Living/Dead/Alive                      What are habitats                      How they provide basic needs                      ID name animals/ plants in diff habitats                      Basic food chains.                      Animals eat</p>	<p><b>Biology</b>  <b>Plants</b>                      Seeds into plants                      Needs of plants to stay healthy.</p>		
<b>Year 3</b>	<p><b>Physics</b>  <b>Light and shadow</b>                      Need light to see                      Light is reflected                      Dangers of the sun                      Shadow formation                      Changing shadow size</p>	<p><b>Chemistry</b>  <b>Rocks and soil</b>                      Grouping-appearance and properties                      Fossils                      soil</p>	<p><b>Biology</b>  <b>Animals including humans</b>                      Skeletons and muscles                      Types of nutrition</p>	<p><b>Biology</b>  <b>Plants</b>                      Functions of parts of plants                      Requirements for life                      Water transport                      Flowers-pollination, seeds, dispersal</p>	<p><b>Physics</b>  <b>Forces and magnets</b>                      Moving objects on surfaces                      Contact/distance forces                      Magnets attract/repel poles                      Grouping materials magnetic/not magnetic</p>	

<b>Year 4</b>	<b>Physics Electricity</b> Appliances Simple circuits and components Will the bulb light Switches Conductors/insulators	<b>Chemistry States of matter</b> Group- SLG Particle Changes of state Water cycle- evapo/cond	<b>Physics Sound</b> Making sounds (vibrations) Sounds travelling in medium Patterns in pitch Patterns in volume Sounds get fainter/ distance	<b>Biology Animals, including humans</b> Function of digestive system Types of teeth/roles Food chains, producers, prey/predator	<b>Biology Science- Living things and their habitats</b> Grouping living things (animals/plants) Vertebrate/Invertebrate Classification keys Changing environments / dangers
<b>Year 5</b>	<b>Biology Living things and their habitats</b> Life cycles– mammal, bird, insect, amphibian Life processes of reproduction– plants/animals	<b>Biology Animals, including humans</b> Changes as humans develop to old age(life cycle) Puberty	<b>Physics Earth and Space</b> Movement of earth/ planets Movement of moon Describe sun/moon Explain day/night seasons	<b>Chemistry Changes of materials</b> Properties and changes of materials Compare/group Dissolving, separating mixtures Testing materials- properties/uses Reversible/non reversible changes	<b>Physics Forces and Mechanical Devices</b> Gravity/ falling Air/water resistance & friction Levers, pulleys & gears (force multipliers)
<b>Year 6</b>	<b>Biology Living things and their Habitats</b> Classifying living things into broad groups Classifying plants and animals Keys	<b>Physics Light</b> Light travels in straight lines How we see Reflecting light Explain shadow	<b>Physics Electricity</b> Brightness of bulbs vs cells/voltage Explain brightness, loudness of buzzers Use circuit symbols Application of knowledge– traffic lights/ burglar alarm	<b>Biology Animals including Humans-</b> Heart and circulatory system Diet/exercise/ drugs Nutrients/water transport	<b>Biology Evolution and Inheritance</b> Living through change over time Evidence of fossils Offspring vary Adaptation leading to evolution

**Date:2023**