



Science Knowledge Year Group Overview						
	Biology			Chemistry	Physics	
<b>Year 1</b>	<b>Animals inc Humans</b> Name common animals Name carnivores, herbivores, omnivores	<b>Seasonal Change</b> Observe weather and changes across seasons	<b>Plants</b> Name basic parts— identify common plants	<b>Everyday Materials</b> Name. Describe and sort everyday materials		
<b>Year 2</b>	<b>Animals inc Humans</b> Animals have offspring, basic needs for survival. Importance of exercise, food hygiene.	<b>Animals inc Habitats</b> Living, dead and never living, describe habitats, basic food chains	<b>Plants</b> Seed/bulb grow into plants. What plants need	<b>Materials and their uses</b> Uses of materials Changing shape of materials		
<b>Year 3</b>	<b>Animals inc Humans</b> Need for right amount of nutrition Skeletons and muscles		<b>Plants</b> Function - including how water is transported Life cycle of plants	<b>Rocks</b> Group different rocks, how they are formed Fossils	<b>Light</b> Need for light to see. How shadows are formed	<b>Forces and Magnets</b> Compare different surfaces. Magnets
<b>Year 4</b>	<b>Animals inc Humans</b> Basic function of digestive system. Teeth. Food chains	<b>Animals inc Habitats</b> Group living things, use classification keys. Change in environment can threaten life.		<b>States of matter</b> Solids, Liquids, gases Change state, Evaporation/condensation	<b>Sound</b> How sound is made, travels. Pitch and volume	<b>Electricity</b> Create simple and series circuits. Parts of circuit. Recognise complete/incomplete circuit linked to output e.g bulb. Test conductivity/insulators
<b>Year 5</b>	<b>Animals inc Humans</b> Describe the changes as humans develop to old age	<b>Living Things and Their Habitats</b> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird		<b>Properties and Changes of Materials</b> Solubility, transparency, conductivity (electrical and thermal) and response to magnets	<b>Earth and Space</b> Movement of the Earth relative to the Sun in the Solar System Movement of the Moon relative to the Earth Describe the Sun, Moon and Earth as	<b>Forces</b> Gravity Air resistance, water resistance, friction Levers, pulleys and gears allow a smaller force to have a greater effect



		Describe the life process of reproduction in some plants and animals		Dissolving in solutions and recovering substances from solutions Use knowledge of solids, liquids and gases to decide how to separate mixtures Understand and give examples of reversible and irreversible changes	approximately spherical bodies Explain Day and Night	
<b>Year 6</b>	<b>Animals Including Humans</b> Human Circulatory System (Heart, blood vessels, blood) Recognise the impact of diet, exercise, drugs and lifestyle on the way bodies function Describe the ways in which nutrients and water are transported within animals, including humans	<b>Living Things and Their Habitats</b> Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals Give reasons for classifying plants and animals based on specific characteristics	<b>Evolution and Inheritance</b> Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago Recognise that living things produce offspring of some kind, but normally offspring vary and are not identical to their parents Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution		<b>Light</b> Recognise that light travels in straight lines and use this to explain that objects are seen because they give out or reflect light into the eye and also to explain why shadows have the same shape as the objects that cast them Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes	<b>Electricity</b> Associate the brightness of a lamp or the volume of a buzzer with the number of voltage cells used in a circuit Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches Use recognise symbols when representing a simple circuit in a diagram



EYFS Science Progression						
0-11 Months	8-20 Months	16-26 Months	22-36 Months	30-50 Months	40-60 Months	Characteristics of Effective Learning Links
Looks around with interest.	<p>Closely observes what people, animals and vehicles do.</p> <p>Knows things are used in different ways e.g. pushing and pulling</p>	<p>Explores objects by linking together different approaches: shaking, hitting, looking, feeling, tasting, pulling, turning and poking.</p>	<p>Notices detailed features of their environment.</p> <p>Enjoys playing with small world.</p>	<p>Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world.</p> <p>Can talk about things they have observed such as plants, animals and natural objects they have found.</p> <p>Talks about why things happen and how they work. Developing an understanding of growth, decay and changes over time.</p> <p>Shows care and concern for living things and the environment.</p>	<p>To eat a healthy range of foodstuffs and understand a need for variety in food.</p> <p>To show some understanding that good practices with regard to exercise, eating, sleeping and hygiene can contribute to good health.</p> <p>To look closely at similarities, differences, patterns and change.</p> <p>To know the importance for good health of physical exercise, and a healthy diet, and talk about ways to keep healthy and safe.</p> <p>To know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another.</p>	<p>Using senses to explore the world around them</p> <p>Taking risks and learning by trial and error</p> <p>Showing a curiosity about objects, events and people</p> <p>Maintaining focus on their activity for a period of time</p> <p>Thinking of ideas</p> <p>Finding ways to solve problems</p> <p>Making links and noticing patterns in their experience</p> <p>Making predictions</p> <p>Testing their ideas</p> <p>Developing ideas of grouping, sequences cause and effect</p>