



RADDLEBARN PRIMARY SCHOOL SUBJECT OVERVIEW IN SCIENCE

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	Context/ Resources
Nursery	<p>Throughout the year children in Nursery (3-4 year olds) will be learning to...</p> <p>Explore how things work. Use all their senses in hands-on exploration of natural materials Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice.</p>						
Big questions			<p>What goes in my tummy?</p> <p>KUW</p>	<p>What is in my garden?</p> <p>KUW/EAD</p>			
Reception	<p>Throughout the year children in Reception will be learning to...</p> <p>Talk about members of their immediate family and community. Name and describe people who are familiar to them Recognise some similarities and differences between life in this country and life in other countries. Explore the natural world around them. Describe what they see, hear and feel whilst outside. Recognise some environments that are different from the one in which they live. Understand the effect of changing seasons on the natural world around them. Early Learning Goals - Past and Present. People, Culture and Communities. The Natural World.</p>						
Big questions	<p>How does my mind and body work?</p> <p>PSED/PD</p>		<p>How can we care for our world?</p> <p>UTW</p>				
Year 1	<p>(seasonal change)</p>	<p><u>Everyday materials</u> Identify a variety of everyday materials, compare and group them based on simple properties.</p>	<p>(seasonal change)</p>	<p><u>Animals including humans</u> Identify common varieties of animals and identify carnivores, herbivores and omnivores. Describe / compare a structure of common animals. Identify, draw and label the basic parts of the human body and relate them to 5 senses.</p>	<p><u>Plants*</u> Identify different types of plants & trees. Describe the structure of flowering plants, including trees.</p> <p><u>Seasonal Changes*</u> Observe and describe changes across 4 seasons, inc weather and length of day.</p> <p>(seasonal change)</p>	<p>(seasonal change)</p>	

Year 2	<u>Living things and their habitats*</u> Identify animals and plants in their habitats. Describe how different habitats are suited for different animals and plants. Describe simple food chains.		<u>Animals including humans</u> Describe basic survival needs of animals inc humans, as well as the importance of exercise nutrition and hygiene.	<u>Plants*</u> Observe and describe plant growth, and what plants need to stay healthy.		<u>Materials</u> Compare the suitability of everyday materials for different uses. Investigate how shapes of some solid objects can be changed.	
Year 3	<u>Rocks</u> Compare and group rocks by appearance and properties. Describe how fossils are formed and how soil is made.	<u>Light*</u> Recognise that light enables us to see and is reflected from surfaces. Recognise how shadows are formed and investigate patterns in shadow changes.	<u>Plants</u> Describe the functions of parts of flowering plants. Explore the varying requirements for plant growth. Investigate how water is transported within plants. Explore parts of a flower relating to pollination and seeds.		<u>Forces and Magnets</u> Observe differences between forces (needing contact, or acting at a distance). Observe how magnets attract and repel each other. Compare and group materials based on magnetism. Predict magnets repelling or attracting based on their poles.	<u>Animals, including humans</u> Identify the need for appropriate nutrition obtained from eating. Identify that humans and some animals have skeletons and muscles (& their purpose).	
Year 4	<u>Living Things and Their Habitats</u> Use classification keys to identify and group living things. Recognise that environment changes can pose dangers to living things.	<u>Animals including Humans</u> Describe functions of parts of the human digestive system. Identify types of teeth and their different functions. Construct and interpret food chains (producers, predators, prey).	<u>States of Matter*</u> Compare and group materials by state of matter. Observe that changes of state occur through heating or cooling (measure temperatures). Identify the roles of evaporation (linked to temp) and condensation in the water cycle.		<u>Electricity</u> Construct a simple series circuit identifying its basic parts. Identify whether or not a lamp will light in a simple circuit. Recognise how a switch works. Recognise common conductors and insulators.	<u>Sound*</u> Recognise that sound comes from something vibrating – vibrations travel through medium to the ear. Find patterns around pitch and volume and how these can be changed.	
Year 5	<u>Forces</u> Explain gravity is a force pulling objects towards Earth's surface. Investigate effects of air resistance, water resistance and friction. Recognise mechanisms allow a smaller force to have a greater effect.	<u>Properties and changes of materials</u> Compare materials based on various properties. Understand mixing and dissolving, and decide how to separate mixtures and solutions. Explain the difference between reversible and irreversible changes.	<u>Earth and Space*</u> Describe the movement of Earth & planets relative to the Sun. Describe the movement of the moon relative to Earth. Explain night, day, moon phases and apparent movement of the Sun by using knowledge of Earth's movement.		<u>Living Things and their habitats</u> Compare life cycles of mammals, amphibians, insects and birds. Describe reproduction of plants and animals.	<u>Animals including Humans</u> Describe the changes as humans develop to old age (mentally, physically).	
Year 6	<u>Light</u> Explain light travels from a light source to our eyes, or to an object, then our eyes. Use idea of light travelling in a straight line to explain that we see objects because they reflect light into our eyes & use this to explain shadow shapes.	<u>Living Things and their Habitats</u> Describe how living things are classified into broad groups based on observable characteristics. Give reasons for classifying plants and animals based on specific characteristics.	<u>Evolution and Inheritance</u> Recognise that fossils provide information about living things that inhabited Earth millions of years ago. Recognise that offspring are similar but not identical to parents. Identify how animals and plants adapt to their environment in different ways, which may lead to evolution.	<u>Electricity*</u> Associate the brightness of a lamp or volume of a buzzer with number / voltage of cells in the circuit. Compare and give reasons for how components function. Represent a simple circuit in a diagram using recognised symbols.		<u>Animals including Humans</u> Identify and explain the function of the main parts of the circulatory system. Recognise the impact of diet, exercise, drugs and lifestyle. Describe how nutrients and water are transported within animals inc humans.	

Bold and * = Topic focus