

Subject: Science	Science Curriculum Map When is science being taught?					
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	<p>Biology - Animals including humans Identify basic body parts and our senses. Look at how animals and plants grow and change and explore lifecycles. Reflecting and observing and the changes in since babyhood. Cross curricular link with PSHE looking at wants and needs for humans.</p> <p>Working Scientifically – Autumn Focus: Asking simple questions</p>	<p>Let's investigate- What makes the loudest sound?</p>	<p>Biology - Plants Research plants- what they need to grow and parts of a flowering plant Explore the butterfly lifecycle first hand. Woodland animal fact files- asking and answering questions including diet and habitat. Recording woodland walk through the senses</p> <p>Let's investigate- Do fir cones know it's raining?</p> <p>Seasonal Changes through Forest Friday Working Scientifically – Spring Focus: Observing and predicting</p>	<p>Biology - Animals including humans Identify and compare common animals Animal classification Let's investigate- Who's poo? (omnivore, herbivore, carnivore) Let's investigate- What is camouflage for? Marwell Zoo trip including workshop on classification and preservation of species.</p>	<p>Let's investigate- How does it Move? Exploring the solar system through cross curricular links.</p> <p>Working Scientifically – Summer Focus: Performing Simple tests</p>	<p>Chemistry - Everyday Materials</p> <p>Investigating building materials- cross curricular link with History great fire of London and fairy tale houses</p>
Year 2	<p>Chemistry: Materials: Investigate different materials – Suitability of everyday materials for particular uses.</p> <p>Working scientifically – Autumn Focus: Identifying and</p>	<p>Chemistry: Changing Materials Let's Investigate! How is Mud Made? Can water make music? Which stuff is stickier? Skittles experiment – colour blending Coke and Mentos.</p>	<p>Animals including humans Basic stages of a life cycle Understand what is needed for survival Understand why exercise, balanced diet and good hygiene are important for humans</p>	<p>Plants Let's investigate: Can seeds grown anywhere? Plant bean diary and investigation</p> <p>Working scientifically – Summer Focus:</p>	<p>Living things and their habitats including burrowing animals.</p> <p>Observe and compare different habitats</p>	<p>Science Assessment</p> <p>Habitats; Living and non-living things;</p> <p>Food chains; Basic needs of animals;</p>

	classifying	experiment What happens when we hold a chocolate in our hand for a count of 100?	Working scientifically – Spring focus: Using observations to suggest answers to questions	gathering and recording data		
Year 3	Animals including humans Skeleton and muscles Know about the skeletal system of a human and understand the purpose of a skeleton and muscles Working Scientifically – Autumn Focus: Observe and take appropriate measurements	Light and shadows Light sources and reflective sources Journey of light from the sun Mirrors and reflections Know what dark is and know that light is reflected from a surface Know how a shadow is formed Understand the danger of direct sunlight	Magnets – see flow Know about and explain how objects attract and repel Understand the different <i>Poles</i> Materials that are magnetic and understand how they work know how some forces require contact and some do not Predict which objects are magnetic Working Scientifically – Spring Focus: Set up simple and fair practical tests	Rocks and Soils Compare and group rocks Know the structure of the earth Where rocks come from. Recognise soils are made from rocks Know how fossils are formed and how soil is made Know the difference between sedimentary, metamorphic and igneous rock Working Scientifically – Summer Focus: Use results to make further predictions	The Water Cycle – geog link Investigate features of the water cycle Magnets Know about and explain how objects attract and repel Understand the different <i>Poles</i> Materials that are magnetic and understand how they work know how some forces require contact and some do not Predict which objects are magnetic	Plants Know the function of different parts of plants and trees Know what a plant needs to help them survive Understand the variation between plants. Know how water is transported Know the lifecycle of a plant and understand the importance of flowers Pollination Healthy eating Understand the importance of a nutritious balanced diet
Year 4	Sound Know how sounds are made, Understand how sound travels from the source to our ears Know the correlation between the pitch and what is producing the sound Know the correlation between the volume of the sound and the	Electricity Identify and name components in a circuit Construct/draw a simple circuit Know the function of a switch Understand the difference between conductors and insulators and give examples of each Working Scientifically –		Animals including humans Teeth – identify different types of teeth and understand their functions Diets and digestive system. Identify and name parts of the human digestive system Know the	Living things and their habitats (plants and animals) Classification and adaptation Create classification keys to identify a group or name a living thing Understand how changes to an environment could endanger living things	States of Matter Changes of state – Solids, Liquids and Gas Group materials into S,L,G Know that some materials change state Measure temperature at which materials change state Understand evaporation and condensation - Recap on The water

	strength of the vibrations	Summer Focus: Report Findings		functions of the organs in the digestive system Recapping on Food chains	Animals including humans Use Food chains to identify producers, predators and prey Construct food chains to identify predators and prey Working Scientifically – Autumn Focus: Use results to draw simple conclusions	Cycle Working Scientifically – Spring Focus: Record findings in a variety of ways including graphs Animals including humans Linked with SRE
Year 5	Physics Materials – Properties and change of materials including evaporation, filtering, dissolving and chemical reactions. Know that some changes result in a new material being made Understand the difference between reversible and irreversible changes. Working scientifically – Autumn Focus making predictions based in scientific knowledge		Living Things and their Habitats Look at life cycles including fleas and rats. Conduct experiments on the growth of bacteria on certain surfaces in school Working Scientifically – Spring Focus: Report and present findings from enquiries, including conclusions SPACE Topic Planets Night and day. Seasons. Lunar cycle.	Animals including Humans SRE – stages of growth in humans	Forces Air resistance, water resistance and friction. Mechanisms – explain how levers, pulleys and gears allow a smaller force to have a greater effect Know the impact of gravity and friction Working Scientifically – Summer Focus: Take measurements, using a range of scientific equipment	Living Things and their Habitats Classifying plants and animals focusing on those in the rainforest. Habitats. Describe how nutrients and water are transported in animals. Life cycles and reproduction. Understand there is a difference between lifecycles
Year 6	Biology – The Heart Recap earlier work on function of heart and circulatory system. Identify and name main parts of the human circulatory system Know the function of	Physics – Electricity Investigate – how to make bulb brighter; Investigate the effect of adding more bulbs to a circuit; Investigate how to put a break into a circuit	Biology - Living Things and their habitats Investigate what conditions cause 'icebergs' to thaw more quickly Collect information about biomes and habitats (specifically polar), animal adaptations: analyse this information to better understand how these adaptations help animals survive in their biomes. Classify living things into broad groups according to observable characteristics and		Working Scientifically – Summer Focus: To collect and analyse data Physics – Light Investigate how light travels in a straight line, angle of	Biology - Animals, including humans Understand the impact of diet, exercise, drugs and life style on your health Know the ways in which nutrients and

	<p>the heart, blood vessels and blood Compare the heartrate of adults and children and also seeing whether weekly exercise routine affects peoples resting heartrate in both adults and children Investigate the effect of exercise on the heart. Healthy eating, balanced diet and healthy lifestyle</p> <p>Working Scientifically – Autumn Focus: making predictions based in scientific knowledge</p>	<p>Know that the number and voltage of cells in a circuit links to the brightness of a lamp or the volume of a buzzer Compare and give reasons for why components work and do not work in a circuit Draw circuit diagrams using correct symbols.</p> <p>Create a trench office – how would they shield the light to avoid detection.</p>	<p>based on similarities and differences Give reasons for classifying plants and animals in a specific way</p> <p>Biology – Evolution and Inheritance Identifying genetic traits that can be passed from parents to offspring and how these can combine in different ways Discover how different adaptations help us in completing everyday tasks: opposing digits, modified beaks, camouflage.</p> <p>Working Scientifically – Spring Focus: Record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p>	<p>refraction, reflection Understand how light moves and how we see objects Understand how shadows have the same shape as the objects that cast them</p>	<p>water are transported in animals including humans</p>
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