

Kilby St Mary's C of E (Aided) Primary School
Science Curriculum Overview



EYFS	Autumn	Spring	Summer			
EYFS	<p>Seasonal Changes - Summer to Autumn - observing and investigating the changes in the weather, plants and animal life.</p> <p>My Body - Learning about our senses and how we use our body. What does my body need to be healthy? The effects of exercise on my body.</p> <p>Pets and Vets - Observing naming and describing familiar animals and their needs.</p> <p>Healthy eating - Looking at a range of different fruit and vegetables. Investigate changes in state through cooking, e.g. soup making, baking.</p>	<p>Seasonal Changes - Winter to Spring - observing and investigating the changes in the weather, plants and animal life.</p> <p>Plants - Investigation of plants in our everyday life: naming common plants; labelling parts; where is the best place to grow a plant; using cameras and magnifiers to explore features; planting seeds and caring for them.</p> <p>Polar Regions - Why does blubber help polar animals? Investigating changes of state with ice experiments.</p>	<p>Seasonal Changes - Spring to Summer - observing and investigating the changes in the weather, plants and animal life.</p> <p>Everyday materials - learn about the different properties of and uses for a variety of materials. Look at materials that are: magnetic and non-magnetic; waterproof and absorbent; flexible and rigid; heavy and light.</p>			
Year	Cycle A		Cycle B			
	Autumn	Spring	Summer	Autumn	Spring	Summer

<p>Year 1 & 2</p>	<p>Identifying Plants Find out what a plant is, identify and describe garden and wild plants and trees, identify the different parts and make observations of growing plants.</p> <p>Identifying Animals Identify, name and compare common animals, UK mammals, birds, reptiles, fish and amphibians. Identify soft carnivores, herbivores and omnivores. Know how to take care of animals.</p>	<p>My Body Identify, name and label body parts, explore what parts our bodies use for different activities, investigate the five senses, exploring sight, sound, the sense of touch, smell and taste</p> <p>Everyday Materials Identify a variety of common materials, describe materials according to their properties, describe why some materials suit certain objects better than others and carry out an experiment to find out which materials are waterproof.</p>	<p>Seasonal Changes Find out and describe the different seasons, how humans and animals are affected by the seasons, length of the day and what the weather is during each season.</p>	<p>Living in Habitats Identify things that are living, dead and have never been alive, understand that living things need a habitat, explore plants and animals that live in seaside habitats, explore plants and animals in unfamiliar habitats, describe a micro habitat and explore food chains.</p> <p>Growing Plants Understand that different seeds and bulbs grow into different plants, explain why and how seeds are dispersed, plan, carry out and investigate the conditions that affect germination, observe and describe how a plant changes as it matures.</p>	<p>Growth and Survival Find out about the offspring of a variety of different animals and how they reproduce, explore how humans grow as they get older, look at a healthy balanced diet and how exercise keeps how bodies healthy. Explore what animals and humans need to survive and explore the different environments as a factor of survival.</p> <p>Exploring Everyday Materials Identify and sort a variety of materials, identifying what is natural and manmade and how some materials can change shape, identify the</p>	<p>Super Scientists Investigate the effect gravity has on everyday objects, what happens to light when it passes through different objects, the wind, whether sound can pass through materials, our senses and reflexes, how germs are transferred by touching things and electrical circuits to make a light bulb light up.</p>
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					suitability of metal, plastic and wood for a variety of purposes, identify different materials that are used for the same product.	
Year 3 & 4	<p>How Plants Grow Clarify and describe the parts of a plant and their functions in photosynthesis, including pollination, seed formation, structure and dispersal</p> <p>Health and Movement Understand that humans get the nutrition they need from what they eat, identifying that a balanced diet is needed, also looking at what different animals and pets eat. What function the skeleton has and what muscles are and how they help us and animals move.</p>	<p>Rocks, Fossils and Soils Explore naturally occurring rocks and their uses, soil and how it is formed and fossils and how they are formed.</p> <p>Light and Shadow Recognise that light is needed in order to see. To explore the sun as a light source, shadows and why they are formed, and how they behave.</p>	<p>Forces and Magnets Explore what forces are and notice that some forces need contact between two objects and compare how things move on different surfaces. To explore how magnetic forces work, identifying magnetic materials and investigating uses of magnets.</p>	<p>Living in Environments Identify a variety of habitats and explore why organisms live in different habitats, group and classify organisms according to their characteristics, using a classification and explore the human impact on habitats and environments.</p> <p>Eating and Digestion Identify and classify carnivores, herbivores and omnivores, construct and interpret a variety of food chains. Identify the different types of teeth and their</p>	<p>States of Matter Explore the properties of solids, liquids and gases, and observe that materials change state when heated or cooled and research the temperatures in degrees Celsius. Explore the water cycle and the part evaporation and condensation play.</p> <p>Changing Sound Explore how sounds are made, how sounds can travel through different materials, pitch and volume and how some materials are effective in</p>	<p>Circuits and Conductors Identify common appliances that run on electricity and how to keep safe. To construct simple circuits, recognise common conductors and insulators and make a simple device which includes a circuit.</p>

				functions in humans and investigate and describe the basic functions of the digestive system.	preventing vibrations from sound sources reaching the ear.	
Year 5 & 6	<p>Life Cycles Describe the process of sexual and asexual reproduction in plants, describe the process of sexual reproduction in animals and compare how different animals reproduce and grow, observe and compare the life cycles of animals in our local environment with other animals around the world and find out about naturalists.</p> <p>Changes and Reproduction Recognise the stages of growth and development in humans, know the gestation period of humans and compare them to other animals, recognise the stages of development during childhood and understand the needs of</p>	<p>Properties and Changes of Materials Know that some materials will dissolve in liquid to form a solution, decide how mixtures and solutions might be separated, explain that some changes form new materials and these changes are not usually reversible, identify when a change caused by heating or cooling is reversible or irreversible, investigate the materials needed for something to burn and the new material formed by burning. Compare</p>	<p>Forces in Action Explain the effects of gravity, identify the effects of friction acting on moving surfaces, identify and explain the effects of air resistance and water resistance, recognise that levers, pulleys and gears allow a smaller force to have greater effect.</p>	<p>Classifying Organisms Recap ways of grouping and classifying organisms according to their characteristics, explore ways of distinguishing between organisms that have similar characteristics, find out about the Carl Linnaeus and his classification system, explore what micro-organisms are and how they can be grouped and identify and classify organisms in the local area.</p> <p>Healthy Bodies Find out how scientific ideas about food and diet</p>	<p>Evolution and Inheritance Recognise that living things produce offspring of the same kind. Identify how animals and plants are adapted to suit their environment and that adaption may lead to evolution, explore evolution and inheritance: Darwin, recognise that living things change over time and that a number of factors can affect a species evolution, understand how humans have evolved over time, and how human behaviour can</p>	<p>Changing Circuits Recap what electricity is, investigate static electricity, recap knowledge and understanding of circuits, use conventional symbols for circuits, investigate ways in which the brightness of a bulb or speed of a motor is changed, plan, carry out and evaluate an experiment and create a simple device using a circuit.</p>

	<p>children at those stages, understand the initial changes inside and outside the body during puberty and how they differ for boys and girls and how the body changes during adulthood and old age.</p>	<p>and group everyday materials and give reasons for the particular uses of everyday materials in relation to their properties.</p> <p>Earth and Space Describe the movements of the Sun, Earth and Moon, explore how the rotation creates day and night, learn about how the Earth's tilt creates seasons, the phases of the moon, discover how theories about the solar system have changed and investigate the planets in the solar system.</p>		<p>has contributed to our knowledge of a balanced diet, investigate the different food groups and find out why a variety of foods is important, find out how nutrients and water are transported in the human body, investigate what happens to the heart when we exercise, investigate how muscles move the skeleton and investigate the effects of tobacco, alcohol and drugs.</p>	<p>affect change in species over time.</p> <p>Seeing Light Recall facts about how shadows are formed and how we can change shadows, understand how our eyes allow us to see, investigate reflection, learn about refraction and investigate the colours in white light.</p>	
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