

Science Curriculum Overview- Lower School

	Autumn1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	<u>The Natural World</u> Explore the world around them e.g. nature and materials in their world e.g. sand, water. Observe and draw pictures of animals and plants.		<u>The Natural World</u> Know some changes in the natural world e.g. changing states of matter. Observe and draw pictures of animals and plants in hot and cold places.	<u>The Natural World</u> Understand some important changes in the natural world e.g. chicks, tadpoles, flowers and plants. How animals behave differently in different seasons.	<u>The Natural World</u> Know similarities and differences between life on Earth and space. Understand some important processes and changes in the natural world e.g. light and dark.	<u>The Natural World</u> Know and discuss how to care for God's world Explore shadows on the playground. Exploring sinking and floating <u>Managing Self</u> Making healthy choices.
	The changing seasons- observe, talk and record the weather.					
Year 1	Animals, including Humans The human body and the senses.		Plants Trees and plants Animals, including Humans Animal groups and feeding relationships e.g. omnivore Common groups of animals e.g. amphibians, reptiles.		Everyday materials Different materials- grouping them and describing properties and their uses. Animals, including Humans Compare and contrast the structure of common animals.	
	Seasonal changes: observing weather, changes in day length, observing changes to trees and plants. Look at animals' habitats in school grounds.					
Year 2	Uses of Everyday Materials The suitability of everyday materials for particular uses. Ways of converting waste into new materials.	Living things and their habitats Living, dead or never been alive. Habitats provide the basic needs for animals and plants.	Living things and their habitats How animals obtain their food from plants and other animals: a simple food chain.	Plants Parts of the plant and the life cycle of plants. What plants need to grow and stay healthy e.g. water, light and a suitable temperature.	Animals including humans Animals, including humans, have offspring, which grow into adults. The life cycles of different animals.	Animals including humans The importance of exercise, eating the right amounts of different types of food, and hygiene.

Science Curriculum Overview- Middle School

	Autumn1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	<p>Rocks, Fossils and Soils The properties of different rocks. How fossils are formed. How different soils are made.</p>	<p>Healthy eating and skeletons Animals, including humans need the right types of nutrition. Animals get nutrition from what they eat. Humans and some other animals have skeletons and muscles for support, protection and movement.</p>	<p>Forces What forces are and how forces can change how objects move on different surfaces. Magnets: Magnetic forces can act as a distance and can attract some materials. Magnets have two different poles and that they attract or repel each other.</p>	<p>Light Light is required to see things and that dark is the absence of light. Light is reflected from surfaces. How shadows are formed and how they can change.</p>	<p>Plants The functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. The requirements of plants for life and growth and how they vary from plant to plant. Water is transported within plants. Flowers play a part in the life cycle of flowering plants, including pollination, seed formation.</p>	
Year 4	<p>Electricity What electricity is. The components in a circuit. Identify insulators and conductors</p>	<p>Digestive System The simple functions of the digestive system in humans. The different types of teeth in humans. The simple function of teeth.</p>	<p>States of Matter States of materials e.g. solid. Materials change state due to changes in temperature. The changes of state of water.</p>	<p>States of Matter 2 Condensation and evaporation and their role in the water cycle.</p>	<p>Sounds Sounds travel in waves Sounds can be made and can be changed e.g. pitch and volume.</p> <p>Living Things and their Habitats Living things can be grouped in a variety of ways</p>	<p>Living Things and their Habitats Classification keys are used to group and identify plants and animals. A food chain can explain the food relationships in a habitat.</p>

Science Curriculum Overview- Upper School

	Autumn1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5	<p>Earth and Space The movement of the Earth, and other planets, relative to the Sun in the solar system. Day and night is caused by the movement of the Earth, relative to the Sun.</p>	<p>Materials Compare and group everyday materials. Solutions and mixtures. Reversible and irreversible changes.</p>		<p>Forces Gravity. Friction is a force between moving surfaces. Air and water resistance. Levers, pulleys and gears allow a smaller force to have greater effect.</p>	<p>Living things and their habitats Reproduction of some flowering plants (sexual and asexual). The work of naturalists.</p>	<p>Human & animal changes The stages of the life cycles of mammals, amphibians, insects and birds. Changes in humans from baby to adult. The organs and parts of the reproduction system in some plants and animals.</p>
Year 6	<p>Classification Observable characteristics in plants and animals are used to categorise and sub-categorise.</p>	<p>Adaptation Plants and animals adapt to their environment and habitat over time.</p>	<p>Evolution Develop knowledge of adaptation: The basics of Darwin's theory of natural selection and survival of the fittest.</p>	<p>Electricity The brightness of a lamp or volume of buzzer can change due to the number and voltage of cells in a circuit.</p>	<p>Body systems and how they work: circulation The human circulatory system and the function of heart, lungs and blood within it.</p>	<p>Healthy Living The importance of exercise, diet and other factors of lifestyle on general health.</p> <p>Light Light appears to travel in straight lines. How we see things is due to the way light travels.</p>