

Science Long Term Plan

	Autumn		Spring		Summer	
CYCLE A						
EYFS, Year 1 & 2	Plants: Introduction to plants Identifying and naming a variety of plants and investigating if beans need water for growth.	Forces and space: Seasonal change Exploring how seasonal changes affect trees, weather patterns and daylight hours.	Living Things: Habitats Discovering plants and animals in a range of habitats.	Animals including humans: Life cycles and health Identifying the stages of animal life cycles and carrying out tests to record growth.	Plants: plant growth Investigating seeds, bulbs and plants and recognising the conditions required for germination and healthy plant growth.	Making connections: Ocean protectors Consolidating knowledge of life cycles, habitats and food chains through ocean and rock pool exploration.
Year 3 & 4	Energy: Light and shadows Exploring the link between light and darkness, observing reflections and investigating different factors that affect shadows.	Animals including humans: Movement and nutrition Exploring the role of skeletons and muscles, learning how the body uses energy and what constitutes a balanced diet.	Materials: Rocks and soils Exploring the physical properties of rocks and soils and fossil formation.	Animals including humans: Digestion and food Exploring the role of the digestive system and comparing teeth and diets of different animals as part of a food chain.	Energy: Electricity and circuits Exploring electrical components and conductivity through circuit building and real-life applications.	Making connections: How does food affect muscle fatigue? Exploring the relationship between food consumption and muscle fatigue through scientific enquiry.
Year 5 & 6	Materials: Mixtures and separation Exploring different types of mixtures and the methods to separate them.	Materials: Properties and changes Exploring the properties of everyday materials and reversible and irreversible changes to them.	Forces and space: Earth and space Exploring day and night and the movement of the Earth, planets and Moon.	Animals, including humans: Circulation and health Exploring the heart and circulatory system and considering how lifestyle choices affect our health.	Energy: Light and reflection Exploring how light travels in straight lines and that this explains observations of shadows and reflection.	Making connections: How reflective are space blankets? Exploring properties focusing on reflective qualities, heat retention, and material composition.
CYCLE B						
EYFS, Year 1 & 2	Animals, including humans: Sensitive bodies Identifying and naming body parts.	Materials: Everyday Materials Identifying and naming objects and the materials from which they are made.	Comparing animals, including humans Learning about animals by comparing and grouping them by similarities and differences.	Materials: Uses of everyday materials Recognising the suitability of materials for specific purposes.	Living Things: Micro-habitats Exploring how microhabitats meet the needs of minibeast.	Making connections: fairytales Broadening understanding of animals, senses and materials through the lens of fairytales.
Year 3 & 4	Force and space: Forces and magnets Investigating motion on different surfaces, learning about friction and comparing its uses.	Materials: states of matter Investigating the properties of solids, liquids, and gases.	Energy: Sound and vibrations Exploring different ways of producing sounds.	Living things: Classification and changing habits Exploring different ways living things can be grouped and make classification keys.	Plants: Plant Reproduction Explaining how plants reproduce within the life cycle of a flowering plant.	Making Connections: How does wind force affect seed dispersal? Using different wind speeds to disperse seeds and measure how force affects the distance they travel.
Year 5 & 6	Materials: Mixtures and separation Exploring different types of mixtures, methods of separation and investigating how temperature affects rates of dissolution.	Materials: Properties and changes Understanding properties: investigating hardness, transparency and conductivity.	Forces and Space: Earth and space Exploring the movement of celestial bodies in the Solar System.	Animals including humans: Circulation and health Studying the human circulatory system; learning about the heart, blood and blood vessels.	Energy: Light and reflection Proving that light travels in a straight line and making observations about reflections and shadows.	Making connections: How reflective are space blankets? Exploring the reflectiveness of space blankets through experiments.