Brant Broughton CofE & Methodist Primary

Science Long Term Plan

Celebrating Everyone, **Preparing for the Future**, **Travelling Together**, **Acting in Hope**

	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	**Living things: Life cycles and reproduction** Exploring the life cycles of plants and animals and the life process of reproduction.	**Forces and space: Unbalanced forces** Investigating gravity, friction, air and water resistance and their effects.	**Living things: Classifying big and small** Grouping vertebrates, invertebrates, plants and micro-organisms by shared characteristics.	**Energy: Circuits, batteries and switches** Developing knowledge of circuits, the effects of changing voltage and how switches contribute to different devices.	**Living things: Evolution and inheritance** Exploring variation and inheritance in different living things and how observations and fossil evidence have led to the theory of evolution.	**Animals, including humans: Human timeline** Exploring how humans change from a baby through to old age, including puberty, measurements of growth and gestation periods.
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.