Booker Avenue Junior School

Science

Long Term Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	**Plants** Parts of plants, needs of plants and their life cycle	**Rocks** Comparing different rocks, fossils, soil formation	**Light** Light sources, how light is reflected off objects, how shadows form, changing shadows, eye protection	**Animals including humans** Nutrition, muscular, skeletal system for support, movement and protection	**Forces and magnets** Non-contact forces, attraction and repulsion of magnets, magnetic materials and the N and S pole of magnets	**Bee project** A look at the relationship between bees and their environment; importance in pollination, food, light and earth's magnetic field
Year 4	**States of matter/ solids, liquids and gases** Group materials based on their properties, changes of state, heating and cooling, the water cycle.	**Animals including humans** Eating, teeth, digestive system and food chains, producers, predators and prey.	**Sound** Making sounds, vibrations, the ear, changes in pitch and volume	**Living things and their habitats** Classification, characteristics, and the effects of environmental changes	**Electricity** Appliances, building circuits and identifying components, circuit diagnostics, conductors and insulators	**The History of Science** Prehistoric times, science through different periods of history (Egyptians, Greeks and Romans), science in the Middle Ages, modern science
Year 5	**Properties and changes of materials** Classifying materials, dissolving, separating and changes of state, uses of materials, reversible and irreversible changes	**Animals including humans** Life cycles, plant and animal reproduction, human life cycle	**Forces** Gravity, air resistance, water resistance and friction between moving surfaces, multiplying forces using levers, pulleys and gears	**Living things and their habitats** Classifying living things, Life cycles of mammals, amphibians, insects and birds	**Earth and space** The movement of Earth, other planets and the Moon in relation to the Sun and each other, spherical bodies, night and day	**The Scientific Method** Steps to observations, comparative testing, identifying, grouping, classifying and pattern seeking.
Year 6	**Animals including humans** The circulatory system, lifestyle, health and disease; transport of water in animals	**Light** How light travels, how we see objects, the shape of shadows	**Electricity** The effects of changing the number and voltage of cells in a circuit; varying the function of components; representing circuits using symbols	**Evolution and inheritance** What we learn by looking at fossils; variation, reproduction and adaptation. Evolution	**Living things and their habitats** Classifying microorganisms, plants and animals	**Preparing for Secondary Science** Improving observations, acids and alkalis, separating colours, photosynthesis, sound and energy