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| **We Are Family** | **Journeys** | **Objects/people that changed the world** | **Planet Earth** | **Can you help me?** | **Wildlife connections** |
| Animals Including Humans (Year 3 aspect) | Sound | Electricity 1 | Plants  | Electricity 2 | Living things and their habitats (conservation) |
| Animals, unlike plants which can make their own food, need to eat in order to get the nutrients they need. Food contains a range of different nutrients – carbohydrates (including sugars), protein, vitamins, minerals, fats, sugars, water – and fibre that are needed by the body to stay healthy. Humans, and some other animals, have skeletons and muscles which help them move and provide protection and support. | Children will identify how sounds are made and recognise that vibrations from sounds travel through a medium to the ear. They will look closely at how the pitch and volume of a sound varies depending on the object that made it and how it gets fainter as the distance from the sound source increases. | Through this first topic of electricity the children will identify common household. They will learn that some will plug into the mains whilst others run on batteries. They will construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. | The topic of plants is introduced this term so as to prepare the garden area ready for planting. It will continue through the summer term as the children make observations of how their seeds and bulbs are growing into mature plants. The children will identify and describe the functions of different parts of flowering plants and explore what plants need for life and growth. They will be introduced to plant reproduction, seed formation and dispersal. | Following on from the children’s introduction to electricity in the spring term the children deepen their understanding of how circuits work. They will construct circuits and investigate the effects of adding more cells or using a battery with a higher voltage on the brightness of bulbs, the volume of a buzzer and the speed of a motor. They will learn that adding more bulbs to a circuit will make each bulb less bright and they will draw simple circuits using the recognised circuit symbols. | Living things can be grouped (classified) in different ways according to their features. Living things live in a habitat which provides an environment to which they are suited (Year 2 learning). These environments may change naturally e.g. through flooding, fire, earthquakes etc. Humans also cause the environment to change. This can be in a good way (i.e. positive human impact, such as setting up nature reserves) or in a bad way (i.e. negative human impact, such as littering).  |



**Year 3 & 4 Science Long Term Plan – Cycle A**

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| **We are Family** | **Journeys** | **Objects/people who changed the World** | **Planet Earth** | **Can you help me?** | **Wildlife Connections** |
| Animals Including Humans ( Year 4 aspect) | Rocks | Forces and Magnets | Plants | States of Matter | Living Things and their Habitats |
| This topic focuses on the human digestive system. The children will learn that food enters the body through the mouth and that digestion starts when the teeth start to break the food down. Children will identify the different types of teeth in humans and their simple functions. Their understanding of food chains will be revisited from year 2 where they will identify producers, predators and prey. | Children learn that rock is a naturally occurring material and we can compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. They will look closely at fossils and describe them in simple terms and they will recognise that soils are made from rocks and organic matter. | Children will understand that a force is a push or a pull and they will compare how objects move across different surfaces. They will explore magnets and find out which materials are magnetic.  | The topic of plants is introduced this term so as to prepare the garden area ready for planting. It will continue through the summer term as the children make observations of how their seeds and bulbs are growing into mature plants. The children will identify and describe the functions of different parts of flowering plants and explore what plants need for life and growth. They will be introduced to plant reproduction, seed formation and dispersal. | Children will be grouping and comparing materials based on their properties of solid, liquid or gas. Through practical investigation children will observe changes in state through heating or cooling and measure the different temperatures at which these change of state occur in degree Celsius (°C)Study and understand the water cycle. | Living things can be grouped (classified) in different ways according to their features. Living things live in a habitat which provides an environment to which they are suited (Year 2 learning). These environments may change naturally e.g. through flooding, fire, earthquakes etc. Humans also cause the environment to change. This can be in a good way (i.e. positive human impact, such as setting up nature reserves) or in a bad way (i.e. negative human impact, such as littering).  |

 **Year 3 & 4 Science Long Term Plan – Cycle B**