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| **We Are Family** | **Journeys** | **Objects/people that changed the world** | **Planet Earth** | **Can you help me?** | **Wildlife connections** |
| Electricity Revisit  D&T/PSHE | Earth & Space | Properties and changes of materials | Evolution |  | Living Things and Their Habitats  Animals Including Humans (Y5) RSE/PSHE |
| Using D&T electrical construction kits children will learn to work collaboratively to create moving vehicles. They will revisit their understanding of electrical circuits and recognise the effects of an open and closed circuit. They will make vehicles move quicker by increasing the voltage. Practise drawing simple circuits using the appropriate symbols. | To know that the Sun is a star and that it is at the centre of our solar system. There are 8 planets and these travel around the Sun in fixed orbits. Earth takes 365¼ days to complete its orbit around the Sun. The Earth rotates (spins) on its axis every 24 hours. As Earth rotates half faces the Sun (day) and half is facing away from the Sun (night). As the Earth rotates, the Sun appears to move across the sky. The Moon orbits the Earth. It takes about 28 days to complete its orbit. | Children will compare and group materials based on their properties. They will know that some materials will know that some materials dissolve to form a solution and they will describe how to recover a substance from a solution. They will investigate separating mixtures through filtering, sieving and evaporating and understand that some changes in state are reversable. | The children will be taught that living things produce offspring of the same kind and that features are inherited from the parents.  Plants and animals have characteristics that make them suited (adapted) to their environment. If the environment changes rapidly, some variations of a species may not suit the new environment and will die. If the environment changes slowly, animals and plants with variations that are best suited survive in greater numbers to reproduce and pass their characteristics on to their young. |  | Through this topic the children will be describing different life cycles and the process of reproduction in some plants and animals. They will learn about sexual and asexual reproduction in plants and name and label the different parts of a flowering plant in regards to pollination.  The Topic of Animals Including Humans is taught alongside RSE – A Journey in Love. The children will describe the changes as humans develop to old age |



**Year 5 & 6 Science Long Term Plan – Cycle A**

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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 | Forces | Light |  |  | Living Things and Their Habitats  Animals Including Humans (Y5) RSE/PSHE |
| Within this topic children will be learning about the human circulatory system and describing the functions of the heart, blood vessels and blood. They will learn about the impact of diet, exercise, drugs and lifestyle on the way our bodies function. | A force causes an object to start moving, stop moving, speed up, slow down or change direction. Gravity is a force that acts at a distance and everything is pulled to Earth by gravity. This causes unsupported objects to fall. The children will identify the effects of air resistance, water resistance and friction that act between moving surfaces. They will investigate different mechanisms and recognise that they allow a small force to be increased to a larger force. | Light appears to travel in straight lines, and we see objects when light from them goes into our eyes. The light may come directly from light sources, but for other objects some light must be reflected from the object into our eyes for the object to be seen. Objects that block light will cause shadows. Because light travels in straight lines the shape of the shadow will be the same as the outline shape of the object. |  |  | Living things can be classified into broad groups according to observable characteristics and based on similarities and differences. Plants and animals are two main groups but there are other livings things that do not fit into these groups e.g. micro-organisms. Children will be asked to give reasons for classifying plants and animals based on specific characteristics.  The Topic of Animals Including Humans is taught alongside RSE – A Journey in Love. The children will describe the changes as humans develop to old age |

**Year 5 & 6 Science Long Term Plan – Cycle B**