## Science Curriculum - Long Term Plan 2018/2019

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Animals including Humans  Name and locate parts of the human body,including those related to senses.  Describe and compare the observable features of animals from a range of groups  Group animals	Animals including Humans  Name and locate parts of the human body,including those related to senses and describe the importance of exercise, a balanced diet and hygene for humans	Rocks  Looking at the layers of the earth. Naming rocks. Examining different rocks and grouping them into sedimentary, igneous or metamorphic Described how fossils are formed	Animals including Humans  Name and describe the functions of the main parts of the digestive system  Construct and interpret food chains	Properties and Changes of Materials  Group and identify materials in different ways according to their properties, based on first hand observation and justify the use of different everyday materials for different uses based on their properties	Micro-organisms  Use the observable features of plants, animals and micro organisms to group, classify and identify them into broad groups, using keys or other methods  Living Things and their Habitats
Seasonal Changes: Autumn  Describe seasonal changes and record observations	Describe the basic needs of animals for survival and the main changes as young animals, including humans grow into adults  Describe how animals get their food from other animals and/or plants, and use simple food chains to describe these relationships	Animals including Humans  -what makes a healthy lifestyle and diet, what do our bodies need to be healthy? Looked at what makes us unhealthy. Looked at human and animal skeletons	States of Matter  Describe the characteristics of different states of matter and group materials on this basis. Describe how materials change state at different temperatures and use this to	Identify and describe what happens when dissolving occurs in everyday situations and describe how to separate mixtures and solutions into their components  Identify with reasons whether changes in materials are reversible or not	Describe the effects of diet, exercise, drugs and lifestyle on how the body functions  Animals including Humans  Name and describe the functions of the main parts of the circulatory system  Changing Circuits

	Materials: Properties and Sorting  Distinguish objects from materials, describe their properties, identify and group everyday materials and compare their suitability for different uses.	and investigated how our muscles work.  Name and describe the functions of the main parts of the musculoskeletal system	describe everyday phenomena, including the water cycle		Use simple apparatus to construct and control a series circuit and describe how the cicuit may be effected when changes are made to it and use recognised symbols to recognise symbols to represent simple series circuit diagrams
Seasonal Changes: Winter  Describe seasonal changes and record observations  Everyday Materials  Distinguish objects from materials, describe their properties, identify and group everyday materials.		Forces and Magnets  Experimenting with different forces, pushing and pulling and friction. Experimenting with magnet poles (like ad unlike magnetic poles), testing magnetic materials and testing magnet strength	Electricity  Identify common appliances that run on electricity, construct a simple circuit naming basic parts, identify whether or not a bulb will light up, recognise that a switch opens and closes a circuit and recognise some common conductors and insulators.	Earth, Space and Moon  Describe the shapes and relative movements of the sun, moon, earth and other planets in the solar system. Explain the apparent movement of the sun across the sky in terms of the earth's rotation and that this results in day and night	Adaptation  Recognise that living things have changed over time and produce offspring. Identify how plants and animals are adapted to suit their environment in different ways and that adaptation may lead to evolution.

Seasonal Changes: Spring  Describe seasonal changes and record observations		Light  Understand that light is the absence of darkness, different materials allow different amounts of light through, sorting materials into opaque, translucent and transparent.  Experiment with making shadows using different materials and how we can change the formation and size of shadows.	Sound  Use the idea that sounds are associated with vibrations and that they require a medium to travel through to explain how sounds are made and heard  Describe the relationship between the pitch of a sound and the features of its source and between the volume of the sound, the strength of the vibrations and the distance from its source	Describe the effects of simple forces that involve contact (air and water resistance, friction and gravity)  Identify simple mechanisms including levers, gears and pullies that increase the effect of a force	Light  Use the idea that light from light sources or reflected light travels in straight lines and enters our eyes to explain how we see objects and shapes.
Plants  Identify and describe the basic structure of a variety of common plants, including trees.	Plants  Identify how different habitats provide basic needs for different kinds of plants and how they depend on each other. Identify a variety of plants.	Plants  Knowing the parts and functions of plants. Knowing what plants need to survive.  Understanding seed dispersal	Living Things and their Habitats  Explain how environmental changes may have an impact on living things	Animals including Humans  Describe and compare different reproductive processes and life cycles in animals	Evolution  Use the basic ideas of inheritance, variation and adaptation to describe how living things have changed over time and evolved and provide evidence for evolution

<b>Seasonal</b>	<b>Changes:</b>	
Summer		

Describe seasonal changes and record observations

## <u>Living Things</u> and their Habitats

Describe the basic needs of plants for survival and the impact of changing these and the main changes as seeds and bulbs grow into mature plants

Identify whether things are alive, dead or have never lived.

Name different plants and animals and describe how they are suited to different habitats

and the life cycle of a plant.

Transporting water and nutrients

Describe the requirements of plants for life and growth

## Living Things and their Habitats

Name, locate and describe the functions of the main parts of plants including those involved in reproduction