Year 1 – 6

Science

EYFS Understanding the world: The world (Science) Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn 1	Everyday Materials Children will learn to identify and describe a variety of materials such as; wood, plastic, paper, rock, metal, fabric etc. Children will explore different ways to group and compare materials based on some simple properties. Seasonal Changes*	Uses of everyday materials Children will identify and compare the suitability of a variety of everyday materials including; wood, metal, plastic, glass, brick, rock and paper. Children will also explore how the shapes of some solid objects can be changed by squashing, bending, twisting and stretching	Rocks Children will compare and group fossils and soils based on their appearance and simple physical properties. They will explore how fossils and soils are formed.	Animals including humans Children will describe the digestive system and explore the functions of human teeth. They will construct and interpret a variety of food chains, identifying producers, predators and prey.	Properties and changes of materials Children will compare and group materials based on their properties. They will explore dissolving, separating materials, uses of everyday materials and reversible and irreversible changes.	Animals including humans Children will identify and name the main parts of the circulatory system and recognise the impact of lifestyle on the body's function. Children will describe the ways in which nutrients and water are transported within animals, including humans.
Autumn 2			Animals including humans Children will learn the need for nutrition, and identify that humans and some other animals have skeletons and muscles.	Living things and their habitats Children will use classification keys to group, identify and name a variety of living things. They will recognise how changing environments can pose dangers to living things.		Evolution and Inheritance Children will explore the information that fossils provide. They will recognise that living things produce varying offspring and identify how animals and plants are adapted to suit their environment and the possible lead to evolution.
Spring 1	Animals including humans Children will identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. As well as this, they will classify them into carnivores, herbivores and omnivores. Children will also identify and name the basic parts of the human body and the associated sense. Seasonal Changes*	Animals including humans Children will describe the basic needs of animals and humans, for survival (water, food and air) as well as the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Forces and Magnets Children will notice some different forces such as friction and magnetic forces. They will explore magnetic materials, poles and the effects of poles.	Electricity Children will construct a simple series electrical circuit, identifying and naming its basic parts. Children will recognise the effect of a switch and explore common conductors and insulators.	Forces Children will explain and explore the force of gravity, air resistance, water resistance and friction. They will explore the effects of mechanisms such as gears, pulleys, levers and springs on forces.	Living things and their habitats Children will describe and justify how living things are classified into groups according to characteristics and based on similarities and differences, including micro-organisms, plants and animals.

Spring 2		Living things and their habitats Children will explore things that are living, dead, and things that have never been alive. They will identify and name a variety of plants and animals in their habitats, including micro-habitats and describe how different habitats provide for different animals and plants.		Sound Children will associate sound with something vibrating. They will find patterns between the pitch and features of the object. As well as patterns between the volume and the strength of the vibrations that produced it	Earth and Space Children will describe the movement of the Earth, and other planets, relative to the Sun, as well as the Moon relative to Earth. They will use this explain day and night.	
Summer 1	Plants Children will identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. They will also describe the basic structure of a variety of common flowering plants, including trees. *Seasonal Changes Throughout the Year Children will observe changes across the four		Plants Children will identify and describe the function of parts of plants such as the roots, stem/trunk, leaves and flowers. They will explore the requirements for life and growth and investigate the way water is transported. They will explore the life cycle of plants including pollination, seed formation and seed dispersal.	States of Matter Children will compare and group solids, liquids and gases. They will observe materials changing state when they are heated or cooled. Children will identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Living things and their habitats Children will describe the differences in life cycles of; mammals, amphibians, insects and birds, as well as describing reproduction in plants and animals.	Light Children will use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. They will use this idea to explain the shape of shadows.
Summer 2	seasons, describe the associated weather and how day length varies.	Plants Children will observe and describe how seeds and bulbs grow into mature plants and describe their basic needs to grow and stay healthy.	Light Children will explore reflection, recognise how shadows are formed and find patterns in the size of shadows and how they change.		Animals including humans Children will learn about the changes from birth to old age, including puberty, and why these changes occur.	Electricity Children will associate the brightness of lamp/volume of buzzer with the number and voltage of cells. They will give reasons for variations in how components function.