

Science Skills Progression						
Biology	Including plants, living things, understanding humans and animals, evolution and heritance					
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Children talk about similarities and differences between living things.	Identify and name a variety of common animals.	Identify and classify animals including humans and understand that animals have offspring which grow into adults.	Identify and discuss how animals can be grouped in a variety of ways.	To understand classification and use this to group animals.	Describe the life process of reproduction in some plants and animals.	Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.
	To describe and compare the structure of a variety of common animals.	Describe and compare the structure of a variety of common animals and identify the purpose of this structure.	Identify that humans and some other animals have skeletons and muscles for support, protection and movement.	Describe the functions of the human skeleton and the digestive system in humans.	Describe the changes as humans develop to old age.	Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.
	To be able to identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.	Identify parts of the body and discuss the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.	Identify the different types of teeth in humans and their simple functions.	Describe the ways in which nutrients and water are transported within animals, including humans.	Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.
	To be able to discuss characteristics of animals and the environment in which they live.	Identify that most living things live in habitats to which they are suited.	Describe how different habitats provide for the basic needs of different kinds of animals and plants.	Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.	To be able to discuss how animals have adapted to their environments over time.	Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.
	To identify and name a variety of common animals that are carnivores, herbivores and omnivores.	Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain.	Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.	Construct and interpret a variety of food chains, identifying producers, predators and prey.	To identify groups of food and how these food groups affect our bodies.	To understand the content of a healthy human diet: carbohydrates, lipids (fats and oils), proteins, vitamins, minerals, dietary fibre and water, and why each is needed.

	Identify and describe the basic structure of a variety of common flowering plants, including deciduous and evergreen trees.	Observe and describe how seeds and bulbs grow into mature plants and how their parts change over time.	To explore the way in which water is transported within plants.	Recognise that environments can change and that this can sometimes pose dangers and have an impact on living things.	Describe the life process of reproduction in some plants and animals.	Give reasons for classifying plants and animals based on specific characteristics.
Chemistry	Including investigating materials including rocks and soil					
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Children can talk about similarities and differences in relation to materials.	Identify and name a variety of everyday materials.	Identify and compare the suitability of a variety of everyday materials.	To discuss whether a selection of materials are man-made or natural.	Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.	Compare and group together everyday materials on the basis of their properties, including conductivity (electrical and thermal), and response to magnets.	Recognise some common conductors and insulators, and associate metals with being good conductors.
	Compare and group together a variety of everyday materials on the basis of their simple physical properties.	Describe how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	Compare and group materials together, according to whether they are solids, liquids or gases.	Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C).	Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. Demonstrate that dissolving, mixing and changes of state are reversible changes.	Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.
	To describe the texture of different rocks they find outside.	Compare and group together rocks based on their appearance and simple physical properties.	Recognise that soils are made from rocks and organic matter.	Describe how fossils are formed when things that have lived are trapped within rock.	To be able to discuss how rocks are used to make different materials.	To identify and group rocks into igneous, metamorphic and sedimentary.
Physics	Including forces, electrical circuits, sound and space					
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Children talk about the features of their own environment and how they might vary.	Observe changes across the 4 seasons.	Observe and describe weather associated with the seasons and how day length varies	To record and gather data on seasonal changes that occur at different times of	Identify the part played by evaporation and condensation in the water cycle and associate	To discuss how weather differs between countries and the effect this has on climate.	To discuss how human activity can cause abnormal weather conditions.

			the year and consider why this occurs.	the rate of evaporation with temperature.		
Identify common appliances that run electricity.	Construct a simple series electrical circuit.	Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.	Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.	Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.	Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.	
Observe the movement of the sun during the day.	Use his/her observations and ideas to suggest the sun's movement.	To observe the phases of the moon and record accurate findings over a period of time.	To discuss the Earth's rotation and explain day and night and the apparent movement of the sun across the sky.	Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.	To know that our sun is a star and about other stars in our galaxy.	
Notice and describe how things move, using simple comparisons such as faster and slower.	Compare how different things move.	Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.	Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.	To explore forces as pushes or pulls, arising from the interaction between 2 objects.	
Describe magnets as having two poles.	Predict whether two magnets will attract or repel each other, depending on which poles are facing.	Identify some magnetic materials.	Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet.	Compare how things move on different surfaces.	Notice that some forces need contact between two objects, but magnetic forces can act at a distance.	
To distinguish between sounds that they hear and discuss how this links to their senses.	Recognise that sounds get fainter as the distance from the sound source increases.	Identify how sounds are made, associating some of them with something vibrating.	Recognise that vibrations from sounds travel through a medium to the ear.	Find patterns between the pitch of a sound and features of the object that produced it.	Find patterns between the volume of a sound and the strength of the vibrations that produced it.	
Recognise that light from the sun can be dangerous and that there are ways to protect eyes.	Notice that light is reflected from surfaces.	Recognise that he/she needs light in order to see things and that dark is the absence of light.	Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.	Recognise that light appears to travel in straight lines.	Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.	