



	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Understanding the relationship between how things are (structure) and the way things work (function).		- Identify and describe the basic structure of a variety of common flowering plants, including trees. - Describe and compare the structure of a variety of common animals. - Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. - Describe the simple physical properties of a variety of everyday materials.	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.	- Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. - Identify that humans and some other animals have skeleton and muscles for support, protection and movement. - Describe magnets as having two poles. - Predict whether two magnets will attract or repel each other, depending on which poles are facing.	- Identify the simple functions of the basic parts of the digestive system in humans. - Identify the different types of teeth in humans and their simple functions.	Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.	Identify and name the main parts of the circulatory system, and describe the functions of the heart, blood vessels and blood.
Understanding that living and non-living things can be grouped in a variety of ways		- Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. - Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. - Identify and name a variety of common animals that are carnivores, herbivores and omnivores. - Compare and group together a variety of everyday materials on the basis of their physical properties.	Explore and compare the differences between things that are living, dead and things that have never been alive.	- Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. - Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.	- Recognise that living things can be grouped in a variety of ways. - Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. - Explore ways of grouping a wide selection of living things that include animals, flowering plants and non-flowering plants. - Compare and group materials together, according to whether they are solids, liquids or gases.	Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity and response to magnets.	- Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals. - Give reasons for classifying plants and animals based on specific characteristics.
Understanding that living things move through different stages of growth and development			Notice that animals, including humans, have offspring which grow into adults.			- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. - Describe the life process of reproduction in some plants and animal. - Describe the changes as humans develop to old age.	
Understanding that everything on Earth exists in one of three states: solid, liquid, gas and the state of matter can change.			Find out about 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. - Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	- Now that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. - 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.	
Understanding that living things have common life processes to survive; lifestyle choices impact survival and health.			- Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. - Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). - Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.	- Explore the requirements of plants for life and growth (air, light, water, nutrients from soil and room to grow) and how they vary from plant to plant. - Investigate the way in which water is transported within plants. - Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. - Identify that animals, including humans, need the right types and amounts of nutrition, and that they cannot make their own food; they get nutrition from what they eat. - Identify that humans and some other animals have skeleton and muscles for support, protection and movement.	Describe the simple functions of the basic parts of the digestive system in humans.	- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. - Describe the life process of reproduction in some plants and animals.	- Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. - Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. - Describe the ways in which nutrients and water are transported within animals, including humans.
Understanding that changing the movement of an object requires a force (push or pull) to be acting on it.				- Compare how things move on different surfaces. - Notice that some forces need contact between two objects, but magnetic forces can act at a distance. - Observe how magnets attract or repel each other and attract some materials and not others.		- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. - 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.	



Understand that living things depend on each other and on the environment; this can be positive or negative.			- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. - Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.		- Recognise that environments can change and that this can sometimes pose dangers to living things. - Construct and interpret a variety of food chains, identifying producers, predators and prey.		
Understanding that living things have changed over time.				Describe in simple terms how fossils are formed when things that have lived are trapped within rock.			- Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. - Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. - Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.
Understand that energy makes things happen and can be seen by its effects; it can be transferred (but is not used up).				- Recognise that they need light in order to see things and that dark is the absence of light. - Recognise that shadows are formed when the light from a light source is blocked by an opaque subject. - Find patterns in the way that the size of shadows change.	- 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 vibrations that produced it. - Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. - 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.		- Recognise that light appears to travel in straight lines. - 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. - 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. - Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. - 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.
Understand that the movement of the Earth affects the times of day; the Sun is at the centre of our solar system		Observe changes across the 4 seasons.					- Describe the movement of the Earth and other planets relative to the sun in the solar system. - Describe the movement of the moon relative to the Earth. - Describe the sun, Earth and moon as approximately spherical bodies. - Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.