

Science Progression 2021-2022

Year 1	Seasonal changes - Autumn Changes across the four seasons Weather associated with each season Varying day length	Materials Objects and the materials they are made of Everyday materials such as wood, plastic, glass, metal, water and rock Simple physical properties of everyday materials		Seasonal changes - Winter Changes across the four seasons Weather associated with each season Varying day length	Animals, including humans Common animals in the groups fish, amphibians, reptiles, birds and mammals Carnivores, herbivores and omnivores Structure of animals including pets Naming basic parts of the human body The 5 senses	Seasonal changes - Spring Changes across the four seasons Weather associated with each season Varying day length	Plants Common wild and garden plants, including deciduous and evergreen trees Structure of common flowering plants, including trees	Seasonal changes - Summer Changes across the four seasons Weather associated with each season Varying day length
Year 2	Living things and their habitats Things that are dead, things that are living, and things that have never been alive Different habitats and how animals are suited to living there Basic needs of animals and plants to survive	Plants Difference between bulbs and seeds Plant bulbs that will flower in the spring Plants need water, light and suitable temperature to grow and stay healthy		Materials Suitability of everyday materials for particular uses Changing objects from some materials by squashing, bending, twisting and stretching		Animals, including humans Offspring of humans and other animals which grow into adults Basic needs of animals, including humans for survival Importance of exercise, eating the right amounts of different types of food, and hygiene	Plants Plant seeds that will flower sooner than bulbs Plants need water, light and suitable temperature to grow and stay healthy	Living things and their habitats Identify and name a variety of plants and animals in their habitats, including micro-habitats 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
Year 3	Rocks Rocks with different appearances and simple physical properties Fossils are formed when things that have lived are tripped within rock over time Soils are made from rocks and organic matter		Animals, including humans Animals, including humans need the right types and amount of nutrition They cannot make their own food – they get nutrition from what they eat Humans and some other animals have skeletons and muscles for support, protection and movement		Light Dark is the absence of light We need light to see things Light is reflected from surfaces Light from the sun can be dangerous and there are ways to protect our eyes	Plants Different parts of flowering plants: roots, stem/rock, leaves and flowers Plants require light, water, nutrients from soil, and room to grow in order to live and grow Water transportation in plants The life cycle of flowering plants including pollination,		Forces Objects move differently on different surfaces Some forces need contact between two objects, but magnetic forces can act at a distance Magnets attract or repel each other, and attract some materials but not others

				seed formation and seed dispersal	Some everyday materials will be attracted to a magnet Magnetic materials Magnets have two poles: north and south. Depending on which poles are facing each other, magnets will either attract or repel each other
Year 4	Animals, including humans The digestive system in humans Different types of human teeth and their simple functions Food chains that include producers, predators and prey	Living things and their habitats Grouping living things in different ways Classification keys How environments change over time, sometimes posing dangers to living things	Sound Sounds are vibrations that travel through a medium to the ear The object making the sound can determine the pitch The volume of the sound is affected by the strength of the vibrations that produced it Sounds get fainter as the distance from the sound source increases	Electricity Many common appliances run on electricity Electrical circuits that contain cells, wires, bulbs, switches and buzzers Conductors and insulators	States of matter Solids, liquids and gases Changing state due to heating and cooling at certain temperatures Evaporation and condensation in the water cycle
Year 5	Earth and space Movement of the Earth and other planets in relation to the sun in the solar system Movement of the Moon relative to the Earth Earth's rotation resulting in day and night, and the apparent movement of the Sun across the sky	Materials The hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets of everyday materials Solutions formed by materials dissolving in liquid Separation of mixtures including filtering, sieving and evaporating Uses of everyday materials	Forces Unsupported objects fall towards the Earth because of gravity acting between the Earth and the falling objects Air resistance, water resistance and friction that act between moving surfaces Mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect	Living things and their habitats Different life cycles of mammals, amphibians, insects and birds Process of reproduction in some plants and animals	Animals, including humans Changes in humans from birth to old age
Year 6	Electricity Lights and buzzers dependent on the number and voltage of cells used in electrical circuits Variations of components, such as brightness of bulbs, loudness of	Light Light travels in straight lines Objects are seen because they give out or reflect light into the eye We see things because light travels from light sources to our eyes or	Evolution and inheritance Fossils provide information about living things that	Living things and their habitats Living things are classified into broad groups according to	Animals, including humans The circulatory system in humans

	buzzers, and on/off positions of switches Symbols of simple circuits in diagrams	from light sources to objects and then to our eyes Shadows have the same shape as the objects that cast them	inhabited the Earth millions of years ago Living things have changed over time Living things produce offspring of the same kind, but normally offspring vary and are not identical to parents Animals and plants are adapted and suit their environment in different ways Adaptation may lead to evolution	characteristics and are based on similarities and differences Classifying plants and animals based on specific characteristics	Functions of the heart, blood vessels and blood Impact of diet, exercise, drugs and lifestyle on the way their bodies function How nutrients and water are transported within animals, including humans
--	---	---	--	---	---