

Progression of Knowledge and Skills in Science

	EYFS	Key Stage One	
		Year 1	Year 2
Working scientifically	- To be able to ask questions about what might happen - To be able to predict what might happen and test their ideas - To be able to use their senses to explore objects and the world around them - To begin to look closely at similarities, differences and patterns - To be able to use first- hand observation to talk about why things happen and how things work using appropriate vocabulary	- Ask simple questions and begin to recognise that they can be answered in different ways with adult support (Year 1 focus) - Use simple equipment to observe closely (Year 1 focus) - Perform simple tests with adult support (Year 1 focus) - To be able to use observations and testing to compare objects, materials and living things. (Year 1 focus) - To identify, sort and group objects, materials and living things, identifying their own criteria for sorting - Use his/her observations and ideas to suggest answers to questions (Year 1 focus) - Gather and record data to help in answering questions with adult support (Year 1 focus)	- Ask simple questions and recognise that they can be answered in different ways using appropriate scientific language from the national curriculum (Year 2 focus) - Use simple equipment to observe closely including changes over time (Year 2 focus) - Perform simple comparative tests (Year 2 focus) - To be able to use observations, testing and simple secondary sources to compare objects, materials and living things. (Year 2 focus) - To identify, sort and group objects, materials and living things, identifying their own criteria for sorting - Use his/her observations and ideas to suggest answers to questions noticing similarities, differences and patterns (Year 2 focus) - Gather and record data to help in answering questions including from secondary sources of information (Year 2 focus)
Plants	- To plant seeds and care for plants. - To draw a range of plants including fruit and vegetables from first-hand observation and talk about their observations	- To be able to identify and name a variety of common wild and garden plants, including deciduous and evergreen trees - To be able to identify and describe the basic structure of a variety of common flowering plants, including trees - To observe and describe how seeds and bulbs grow into mature plants (moved from Y2)	- To be able to sequence the life cycle of a plant - To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy

Animals, including humans	- To show some understanding that good practices with regard to exercise, eating, sleeping and hygiene can contribute to good health. - To observe minibeasts and talk about their observations	- 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 - Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) - Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense (links to PSHE)	- Understand that animals, including humans, have offspring which grow into adults (links to PSHE) - 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
Living things and their habitats	To demonstrate care and concern for living things and the environment by helping to look after the garden and the animals and plants that live in it.		- Explore and compare the differences between things that are living, dead, and things that have never been alive - 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 - 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
The Environment	To understand the need to respect and care for the natural environment.		- To explore how human beings are affecting the environment - To understand that some materials can be recycled which is better for the environment - To understand that water is important to humans and should not be wasted.

Materials	- To be able to identify objects that are soft, hard, rough, smooth, shiny or dull - To be able to use a magnet to identify objects that magnetic - Compare how materials change over time and in different conditions e.g. freezing and melting - To extend their vocabulary, especially by grouping and naming	- Distinguish between an object and the material from which it is made. - Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock - Describe the simple physical properties of a variety of everyday materials including waterproof, not waterproof, bendy, stretchy, stiff, dull, shiny, hard, soft, smooth and rough. - Compare and group together a variety of everyday materials on the basis of their simple physical properties	- Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses - Describe how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching - Describe the simple physical properties of a variety of everyday materials including rigid, flexible, elastic, absorbent, not absorbent, transparent, translucent and opaque
Seasonal changes	- Play and explore outside in all seasons and in different weather - Observe living things throughout the year and talk about the changes they observe.	- Observe changes across the four seasons - Observe and describe weather associated with the seasons and how day length varies (links to geography & KS2 weather and climate topic)	
Electricity			- To understand that mains electricity is dangerous - To identify a range of devices that use mains electricity to work - To understand that batteries provide a safer source of electricity - To know how to put batteries in a torch - To be able to construct a simple circuit (Y5 recap and extend)
Scientists and Inventors		- To find out about the work of the following scientists and inventors: Ole Kirk Christiansen, Charles Macintosh, George Mottershead, George James Symons and Linda Brown Buck (Year 1 focus) - To find out about and discuss the work of notable scientists and inventors including: Thomas Edison, Elizabeth Garrett Anderson, Louis Pasteur, Rachel Carson and James Blyth (Year 2 focus)	- To find out about the work of the following scientists and inventors: Ole Kirk Christiansen, Charles Macintosh, George Mottershead, George James Symons and Linda Brown Buck (Year 1 focus) - To find out about and discuss the work of notable scientists and inventors including: Thomas Edison, Elizabeth Garrett Anderson, Louis Pasteur, Rachel Carson and James Blyth (Year 2 focus)