



Science Progression of subject knowledge

Reception	Year 1	Years 2	Year 3	Year 4	
Plants. Animals (including humans) and Living things and their habitats					
<p>Understanding the World: The World Children know about similarities and differences in relation to places and living things.</p> <p>They talk about the features of their own immediate environment and how environments might vary from one another.</p> <p>They make observations of animals and plants and explain why some things occur and talk about changes.</p>	<p>Y2 Living things and their habitats: explore and compare the difference between things that are living, dead and things that have never been alive</p>	<p>Plants: identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</p> <p>Seasonal Change: observe (habitat) changes across the four seasons. Seasonal Change: observe and describe weather associated with the seasons and how day length varies.</p> <p>Plants: identify and describe the basic structure of a variety of common flowering plants</p> <p>Plants: identify and name the roots, trunk, branches and leaves of a tree.</p> <p>Seasonal Change: observe (plant) changes across the four seasons.</p> <p>Plants: observe and describe how seeds and bulbs grow into mature plants</p> <p>Plants: find out and describe how plants need water, light and warmth to grow and stay healthy</p> <p>Living things and their habitats: identify and name a variety of plants and animals in their habitats, including micro habitats</p> <p>Animals, including humans: identify and name a variety of common animals, including fish, amphibians, reptiles, birds and mammals</p> <p>Seasonal Change: observe (animal) changes across the four seasons.</p> <p>Animals, including humans: know the basic stages in a life cycle for animals, including humans</p> <p>Animals, including humans: find out and describe the basic needs of animals, including humans, for survival (water, food and air)</p> <p>Living things and their habitats: describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name the different sources of food.</p> <p>Animals, including humans: describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p>Animals, including humans: identify, name, draw and label the basic part of the human body and say which part of the body is associated with each sense.</p> <p>Animals, including humans: find out and describe the basic needs of animals, including humans, for survival (water, food and air)</p> <p>Animals, including humans: know that animals, including humans, have offspring which grow into adults.</p> <p>Animals, including humans: know the basic stages in a life cycle for animals, including humans</p>	<p>Living things and their habitats: identify that most living things live in habitats to which they are suited are describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other</p>	<p>Living things and their habitats: explore and use classification keys to help group, identify and name a variety of living thing in their local and wider environment,</p> <p>Plants: identify and describe the functions of different parts of the flowering plant: roots, stem/trunk/leaves and flowers</p> <p>Plants: explore the parts flowers play in a flowering plant life cycle including, pollination, seed formation and seed dispersal</p> <p>Plants: explain the requirements of plants for life and growth (air, light, water, nutrients, room to grow) and how they vary between plants</p> <p>Plants: know the ways in which water is transported between plants.</p> <p>Living things and their habitats: recognise that environments can change and sometimes pose danger to living things.</p> <p>Living things and their habitats: explore and use classification keys to help group, identify and name a variety of living thing in their local and wider environment,</p> <p>Animals, including humans: construct and interpret a variety of food chains, identifying producer, predators and prey,</p> <p>Living things and their habitats: recognise that environments can change and sometimes pose danger to living things.</p> <p>Animals, including humans: describe the simple functions of the parts of the digestive system in humans</p> <p>Animals, including humans: know the importance of a nutritious, balanced diet.</p> <p>Animals, including humans: identify that humans, and some other animals, have skeletons and muscles for support, protection and movement</p> <p>Light: recognise that they need light in order to see things and that dark is the absence of light and recognise that light from the sun can be dangerous and that there are ways to protect their eyes</p> <p>Animals, including humans: identify the different types of teeth in humans and identify their functions.</p> <p>Sound: recognise that vibrations from sounds travel through a medium to the ear</p>	<p>Living things and their habitats: recognise that living things can be grouped in a variety of ways.</p>

Everyday Materials, Uses of everyday materials, Forces and Magnets, Rocks, and States of matter

Reception	Year 1	Years 2	Year 3	Year 4
<p>Understanding the World: The World Children know about similarities and differences in relation to objects and materials</p> <p>They talk about the features of their own immediate environment and how environments might vary from one another.</p> <p>They explain why some things occur and talk about changes.</p>	<p>Everyday Materials: distinguish between an object and the material from which it is made</p> <p>Everyday Materials: identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p>	<p>Uses 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</p> <p>Years 2</p>	<p>Rocks: recognise that soils are made from rocks and organic matter.</p> <p>Year 3</p>	
	<p>Everyday Materials: describe the simple physical properties of a variety of everyday materials</p> <p>Everyday Materials: compare and group together a variety of everyday materials on the basis of their simple physical properties.</p>		<p>Rocks: compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</p> <p>Rocks: describe in simple terms how fossils are formed when things that have lived are trapped within rock.</p> <p>Forces and Magnets: compare how things move on different surfaces</p> <p>Forces and Magnets: 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</p>	<p>States of matter: compare and group materials together, according to whether they are solids, liquids or gases</p> <p>States of matter: 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)</p> <p>States of matter: identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p>
		<p>Uses of everyday materials: find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p>	<p>Forces and Magnets: notice that some forces need contact between two objects, but magnetic forces can act at a distance</p> <p>Forces and Magnets: observe how magnets attract or repel each other and attract some materials and not others</p> <p>Forces and Magnets: describe magnets as having two poles</p> <p>Forces and Magnets: predict whether two magnets will attract or repel each other, depending on which poles are facing.</p>	

Light and Sound

Reception	Year 1	Years 2	Year 3	Year 4
<p>Understanding the World: The World Children know about similarities and differences in relation to objects and materials</p> <p>They talk about the features of their own immediate environment and how environments might vary from one another.</p> <p>They explain why some things occur and talk about changes.</p>	<p>Everyday Materials: identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p> <p>Everyday Materials: describe the simple physical properties of a variety of everyday materials</p> <p>Everyday Materials: compare and group together a variety of everyday materials on the basis of their simple physical properties.</p>	<p>Uses 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</p>	<p>Light: recognise that they need light in order to see things and that dark is the absence of light</p> <p>Light: notice that light is reflected from surfaces</p> <p>Light: recognise that light from the sun can be dangerous and that there are ways to protect their eyes</p> <p>Light: recognise that shadows are formed when the light from a light source is blocked by an opaque object</p> <p>Light: find patterns in the way that the size of shadows change.</p>	
	<p>Animals, including humans: identify, name, draw and label the basic part of the human body and say which part of the body is associated with each sense</p>			

Electricity				
Reception	Year 1	Years 2	Year 3	Year 4
<p>Understanding the World: The World Children know about similarities and differences in relation to objects and materials</p> <p>They talk about the features of their own immediate environment and how environments might vary from one another.</p> <p>They explain why some things occur and talk about changes.</p>	<p>Everyday Materials: <i>identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</i></p> <p>Everyday Materials: <i>describe the simple physical properties of a variety of everyday materials</i></p> <p>Everyday Materials: <i>compare and group together a variety of everyday materials on the basis of their simple physical properties.</i></p>	<p>Uses of everyday materials: <i>identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</i></p>		<p>Electricity: identify common appliances that run on electricity</p> <p>Electricity: construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p> <p>Electricity: 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</p> <p>Electricity: recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p> <p>Electricity: recognise some common conductors and insulators, and associate metals with being good conductors.</p>