

Science Progression Framework

Materials	Animals inc. Humans	Living Things & Their Habitats	Plants	Light	Seasonal Changes	Key
Can talk about some of the things they have observed such as plants, animals, natural and found objects.	Can talk about some of the things they have observed such as plants, animals, natural and found objects.	Explore and compare the differences between things that are living, dead, and things that have never been alive	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees	Recognise that they need light in order to see things and that dark is the absence of light	Observe changes across the 4 seasons	EYFS
Distinguish between an object and the material from which it is made.	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.	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 describe the basic structure of a variety of common flowering plants, including trees.	Notice that light is reflected from surfaces	Observe and describe weather associated with the seasons and how day length varies.	Y1
Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.	Identify and name a variety of common animals that are carnivores, herbivores and omnivores.	Identify and name a variety of plants and animals in their habitats, including microhabitats	Observe and describe how seeds and bulbs grow into mature plants	Recognise that light from the sun can be dangerous and that there are ways to protect their eyes	Rocks	Y2
Describe the simple physical properties of everyday materials.	Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets).	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.	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Recognise that shadows are formed when the light from a light source is blocked by an opaque object	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.	Y3
Compare and group together a variety of everyday materials on the basis of their simple physical properties.	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.	Recognise that living things can be grouped in a variety of ways.	Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.	Find patterns in the way that the size of shadows change	Describe in simple terms how fossils are formed when things that have lived are trapped within rock.	Y4
Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.	Notice that animals, including humans, have offspring that grow into adults.	Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.	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	Recognise that light appears to travel in straight lines	Recognise that soils are made from rocks and organic matter.	Y5
Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).	Recognise that environments can change and that this can sometimes pose dangers to living things.	Investigate the way in which water is transported within plants	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	Evolution and Inheritance	Y6
Compare and group materials together, according to whether they are solids, liquids or gases.	Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird	Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.	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 living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago	
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 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	Describe the life process of reproduction in some plants and animals.	Forces & Magnets	Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them	Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents	
Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Identify that humans and some other animals have skeletons and muscles for support, protection and movement.	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	Compare how things move on different surfaces	Electricity	Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.	
Know that some materials will dissolve in a liquid to form a solution, and describe how to recover a substance from a solution.	Describe the simple functions of the basic parts of the digestive systems in humans.	Give reasons for classifying plants and animals based on specific characteristics.	Notice that some forces need contact between two objects, but magnetic forces can act at a distance	Identify common appliances that run on electricity	Earth and Space	
Compare and group together everyday materials on the basis of their properties, including hardness,	Identify the different types of teeth in humans and their simple functions.		Observe how magnets attract or repel each other and attract some materials and not others	Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs,	Describe the movement of the Earth, and other planets, relative to the Sun in the solar system	



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solubility, transparency, conductivity (electrical and thermal) and response to magnets.				switches and buzzers	
Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.	Construct and interpret a variety of food chains, identifying producers, predators and prey.		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	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	Describe the movement of the Moon relative to the Earth
Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, woods and plastic,	Describe the changes as humans develop to old age.		Describe magnets as having two poles	Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit	Describe the Sun, Earth and Moon as approximately spherical bodies
Demonstrate that dissolving mixing and changes of state are reversible changes.	Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood		Predict whether two magnets will attract or repel each other, depending on which poles are facing	Recognise some common conductors and insulators, and associate metals with being good conductors.	Use the idea of the Earth's rotation to explain day and night, and the apparent movement of the sun across the sky.
Explain that some changes result in the formation of new materials, and this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.	Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.		Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object	Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit	
	Describe the ways in which nutrients and water are transported within animals, including humans.		Identify the effects of air resistance, water resistance and friction, that act between moving surfaces	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	
			Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	Use recognised symbols when representing a simple circuit in a diagram.	