

Science Progression Plan

Legsby Primary School



	Year 1	Year 2
Human Body	The basic body parts are the head, arms, legs, nose, eyes, ears, mouth, hands and feet. The five senses are hearing, sight, smell, taste and touch. Ears are used for hearing, eyes are used to see, the nose is used to smell, the tongue is used to taste and skin gives the sense of touch. Draw and label the main parts of the human body and say which body part is associated with which sense	Human offspring go through different stages as they grow to become adults. These include baby, toddler, child, teenager, adult and elderly. Describe the stages of human development (baby, toddler, child, teenager, adult and elderly).
Staying Safe	It is important to stay safe. Some ways to stay safe include staying safe in strong sunlight (sun cream, sun hat and sunglasses), crossing roads (stop, look and listen), in the kitchen (not touching hot or sharp objects) and with household chemicals (not touching, drinking or eating). Describe ways to stay safe in some familiar situations	Humans need water, food, air and shelter to survive. Describe what humans need to survive.
Healthy Lifestyle	Hand washing and good hygiene are important parts of a healthy lifestyle and prevent the spread of germs. Explain why hand washing and cleanliness are important	A healthy lifestyle includes exercise, good personal hygiene, good quality sleep and a balanced diet. Risks associated with an unhealthy lifestyle include obesity, tooth decay and mental health problems. Describe the importance of a healthy lifestyle, including exercise, a balanced diet, good quality sleep and personal hygiene.
Pattern Seeking	There are four seasons: spring, summer, autumn and winter. Certain events and weather patterns happen in different seasons. Observe changes across the four seasons.	The UK has typical weather in each of the seasons. For example, winter is cold and sometimes frosty, whereas summer is warm and sometimes sunny. Describe typical UK seasonal weather patterns.

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Changes	Day length (the number of daylight hours) is longer in the summer months and shorter in the winter months. Observe and describe how day length changes across the year.	Some objects and materials can be changed by squashing, bending, twisting, stretching, heating, cooling, mixing and being left to decay. Describe how some objects and materials can be changed and how these changes can be desirable or undesirable.
Earth	Different types of weather include sunshine, rain, hail, wind, snow, fog, lightning, storm and cloud. The weather can change daily and some weather types are more common in certain seasons, such as snow in winter. Observe and describe different types of weather.	The Earth is spherical and is covered in water and land. When it is daytime in one location, it is night time on the other side of the world. Describe features of Earth using words and pictures
Phenomena	A shadow is formed when light from a light source, such as the Sun, is blocked by an opaque object, but not by transparent objects. Explain in simple terms how shadows are formed.	When an instrument is played by plucking, striking or blowing, the air around or inside it vibrates. These vibrations travel as a sound wave to the ear. Explain in simple terms how sounds are made.
Forces	Simple equipment can be used for measuring weather, such as measuring temperature with a thermometer; identifying wind direction and force with a windsock or measuring rainfall with a rain gauge. Investigate whether using toys, models or simple equipment.	Some objects float and others sink. Objects that float are typically light or hollow. Objects that sink are typically heavy or dense. Sort and group objects that float and sink.
Modelling	Electrical circuits can light lamps or sound a buzzer. A switch turns an electrical circuit off and on. Describe, following exploration, what simple electrical circuits can do	Models can have moving parts that use levers, sliders, wheels and axles. Make models with moving parts.

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Report and Conclude	The results are information that has been found out from an investigation. Talk about what they have done and say, with help, what they think they have found out.	The results are information that has been found out from an investigation and can be used to answer a question. Begin to notice patterns and relationships in their data and explain what they have done and found out using simple scientific language.
Gather and Record Data	Data can be recorded and displayed in different ways, including tables, pictograms and drawings. With support, gather and record simple data in a range of ways (data tables, diagrams, Venn diagrams).	Data can be recorded and displayed in different ways, including tables, charts, pictograms and drawings. Use a range of methods (tables, charts, diagrams and Venn diagrams) to gather and record simple data with some accuracy.
Questioning	Question words include what, why, how, when, who and which. Ask simple scientific questions	Questions can help us find out about the world. Ask and answer scientific questions about the world around them.
Measurement	Simple equipment is used to take measurements and observations. Examples include metre sticks, measuring tapes, egg timers and hand lenses. With support, use simple equipment to measure and make observations.	Simple equipment is used to take measurements and observations. Examples include timers, hand lenses, metre sticks and trundle wheels. Use simple equipment to measure and make observations.
Investigation	Simple tests can be carried out by following a set of instructions. With support, follow instructions to perform simple tests and begin to talk about what they might do or what might happen.	Tests can be carried out by following a set of instructions. A prediction is a guess at what might happen in an investigation. Follow a set of instructions to perform a range of simple tests, making simple predictions for what might happen and suggesting ways to answer their questions.

Observation	Objects, materials and living things can be looked at and compared. Observe objects, materials, living things and changes over time, sorting and grouping them based on their features.	Objects, materials and living things can be looked at, compared and grouped according to their features. Observe objects, materials, living things and changes over time, sorting and grouping them based on their features and explaining their reasoning.
Identification and Classification	A material is what an object is made from. Everyday materials include wood, plastic, glass, metal, water, rock, brick, paper and fabric. Identify and name what an object is made from, including wood, plastic, glass, metal, water and rock.	Some foods, such as ice and chocolate, melt when heated, but then harden (solidify or freeze) when cooled. Observe what happens when a range of everyday materials, including foods, are heated and cooled, sorting and grouping them based on their observations.
Properties and Uses	Materials have different properties, such as hard or soft; stretchy or stiff; rough or smooth; opaque or transparent; bendy or rigid; waterproof or not waterproof; magnetic or nonmagnetic. Investigate and describe the simple physical properties of some everyday materials, such as hard or soft; stretchy or stiff; rough or smooth; opaque or transparent; bendy or rigid; waterproof or not waterproof and magnetic or non-magnetic	A material's physical properties make it suitable for particular purposes, such as glass for windows and brick for building walls. Many materials are used for more than one purpose, such as metal for cutlery and cars. Compare the suitability of a range of everyday materials for particular uses, including wood, metal, plastic, glass, brick, rock, paper and cardboard.
Identification and Classification	Plants are living things. Common plants include the daisy, daffodil and grass. Trees are large, woody plants and are either evergreen or deciduous. Trees that lose their leaves in the autumn are called deciduous trees. Examples include oak, beech and rowan. Trees that shed old leaves and grow new leaves all year round are called evergreen trees. Examples include holly and pine. Identify, compare, group and sort a variety of common wild and garden plants, including deciduous and evergreen trees, based on observable features. Animals are living things. Animals can be sorted and grouped into six main groups: fish, amphibians, reptiles, birds, invertebrates and mammals. Identify, compare, group and sort a variety of common animals, including fish, amphibians, reptiles, birds, invertebrates and mammals, based on observable features.	Animals have offspring that grow into adults. Different animals have different stages of growth or life cycles. Describe the basic life cycles of some familiar animals (egg, caterpillar, pupa, butterfly; egg, chick, chicken; spawn, tadpole, froglet, frog). A habitat is a place where a living thing lives. A microhabitat is a very small habitat. Identify and name a variety of plants and animals in a range of habitats

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Parts and Functions	The basic plant parts include root, stem, leaf, flower, petal, fruit, seed and bulb. Trees have a woody stem called a trunk. Label and describe the basic structure of a variety of common plants. Different animal groups have some common body parts, such as eyes and a mouth, and some different body parts, such as fins or wings. Label and describe the basic structures of a variety of common animals, including fish, amphibians, reptiles, birds and mammals.	Plants need water, light and a suitable temperature to grow and stay healthy. Without any one of these things, they will die. Describe how plants need water, light and a suitable temperature to grow and stay healthy.
Nutrition	Carnivores eat other animals (meat), herbivores eat plants and omnivores eat other animals and plants. Group and sort a variety of common animals based on the foods they eat.	Food chains show how living things depend on one another for food. All food chains start with a plant, followed by animals that either eat the plant or other animals. Interpret and construct simple food chains to describe how living things depend on each other as a source of food
Survival	Living things need to be cared for in order for them to survive. They need water, food, warmth and shelter. Describe how to care for plants and animals, including pets.	Animals need water, food, air and shelter to survive. Their habitat must provide all these things. Explain how animals, including humans, need water, food, air and shelter to survive.
Habitats	The local environment is a habitat for living things and can change during the seasons. Observe the local environment throughout the year and ask and answer questions about living things and seasonal change	Local habitats include parks, woodland and gardens. Habitats beyond the locality include beaches, rainforests, deserts, oceans and mountains. All living things live in a habitat to which they are suited and it must provide everything they need to survive. Describe a range of local habitats and habitats beyond their locality (beaches, rainforests, deserts, oceans and mountains) and what all habitats provide for the things that live there.

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Physical Things	Materials can be grouped according to their properties. Compare and group materials in a variety of ways, such as based on their physical properties; being natural or manmade and being recyclable or no recyclable.	Living things are those that are alive. Dead things are those that were once living but are no longer. Some things have never been alive. Compare and group things that are living, dead or have never been alive.
Phenomena	Shadows are normally the same shape as the object that cast them. Shadows change during the day as the Sun appears to change position in the sky. Shadows occur where light is blocked by an opaque object. Compare shadows made by different objects and materials.	Volume is how loud or quiet a sound is. Pitch is how high or low a sound is. Compare the volume and pitch of sounds made by instruments, their voices or other
Living Things	Plants grow from seeds and bulbs. Seeds and bulbs need nutrients from soil, water and warmth to start growing (germinate). As the plant grows bigger, it develops leaves and flowers. Observe and describe how seeds and bulbs change over time as they grow into mature plants.	Plants grow from seeds and bulbs. Seeds and bulbs need nutrients from soil, water and warmth to start growing (germinate). As the plant grows bigger, it develops leaves and flowers. Observe and describe how seeds and bulbs change over time as they grow into mature plants.