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Progression Map

Area of Learning and Development	Aspect	16 – 26 months	22 – 36 months	30 – 50 months	40 – 60+ months
Understanding the world	The World	Explore objects by linking together different approaches; shaking, hitting, looking, feeling, tasting, mouthing, pulling, turning and poking Matches parts of objects that fit together, e.g. puts lid on teapot	Enjoys playing with small-world models such as a farm, a garage, or a train track Notices detailed features of objects in their environment	Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world Can talk about some of the things they have observed such as plants, animals, natural and found objects Talk about why things happen and how things work Developing an understanding of growth, decay and changes over time Shows care and concern for living things and the environment	Looks closely at similarities, differences, patterns and change

Early Learning Goal: Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.

Strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge of content	To identity and name a variety of common animals including fish, amphibians, reptiles, birds and mammals To identify and name a variety of common animals that are carnivores, herbivores and omnivores To describe and compare the structure of a variety of common animals (fish, amphibians,	To explore and compare the difference between things that are living, dead and things that have never been alive To 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	To identify and describe the functions of different parts of a flowering plant: roots, stem/trunk, leaves and flowers To 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	To describe the simple functions of the basic parts of the digestive system in humans To identify the different types of teeth in humans and their simple functions To construct and interpret a variety of food chains, identifying producers, predators and prey	To compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets To know that some materials will dissolve in liquid to form a solution and describe	To 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 To give reasons for classifying plants and animals based on specific characteristics

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- Animals including humans
- Living things and their habitats
- Materials
- Plants
- Light
- Electricity
- Forces
- Rocks
- Sound
- Earth and Space
- Evolution
- Seasonal change

reptiles, birds and mammals including pets) To identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	plants and how they depend on each other To identify and name a variety of plants and animals in their habitats, including micro-habitats To 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	To investigate the way in which water is transported within plants To explore the parts that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal	To recognise that living things can be grouped in a variety of ways To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment To recognise that environments can change and that this can sometimes pose dangers to living things	how to recover a substance from a solution To use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating To give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic To demonstrate that dissolving, mixing and changes of state are revisable changes To explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action of acid bicarbonate of soda	To identify and name the main parts of the human circulatory system and describe the functions of the heart, blood vessels and blood To recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function To describe the ways in which nutrients and water are transported within animals, including humans
To distinguish between an object and the material from which it is made To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock To describe the simple physical properties of a variety of everyday materials To compare and group together a variety of everyday materials on the basis of their simple physical properties	To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	To 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 To identify that humans and some other animals have skeletons and muscles for support, protection and movement	To compare and group materials together, according to whether they are solids, liquids or gases To 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 To identify that part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature	To know the differences in the life cycles of a mammal, an amphibian, an insect and a bird	To associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit To 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 To use recognised symbols when representing a simple circuit in a diagram
To observe changes across the four seasons To observe and describe weather associated with seasons and how day length varies	To observe and describe how seeds and bulbs grow into mature plants	To compare and group together different kinds of rocks on the basis of their appearance and simple physical properties To describe in simple terms how fossils are formed when things that have lived are trapped within rock			

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	To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees To identify and describe the basic structure of a variety of common flowering plants, including trees	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy To notice that animals, including humans, have offspring which grow into adults To find out about and describe the basic needs of animals, including humans, for survival (water, food and air) To describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene	To recognise that soils are made from rocks and organic matter To recognise that they need light in order to see things and that dark is the absence of light To notice that light is reflected from surfaces To recognise that light from the sun can be dangerous and that there are ways to protect their eyes To recognise that shadows are formed when the light from a light source is blocked by an opaque object To find patterns in the way the size of shadows change To compare how things move on different surfaces To notice that some forces need contact between two objects, but magnetic forces can act at a distance To observe how magnets, attract or repel each other and	To identify common appliances that run on electricity To construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers To 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 To recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit To recognise some common conductors and insulators and associate metals with being good conductors To identify how sounds are made, associating some of them with something vibrating To recognise that vibrations from sounds travel through a medium to the ear	To describe the life process of reproduction in some plants and animals To describe the changes as humans, develop to old age To explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object To identify the effects of air resistance, eater resistance and friction, that act between moving surfaces To recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect To describe the movement of the Earth and other planets, relative to the Sun in the solar system To describe the movement of the Moon relative to the Earth To describe the Sun, Earth and Moon as	To recognise that light appears to travel in straight lines To 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 To 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 To use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them To recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago To recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents

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			attract some materials and not others To 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 To describe magnets as having two poles To predict whether two magnets will attract or repel each other, depending on which poles are facing	To find patterns between the pitch of a sound and features of the object that produced it To find patterns between the volume of a sound and the strength of the vibrations that produced it To recognise that sounds get fainter as the distance from the sound source increases	approximately spherical bodies To use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky	To identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution
Working scientifically **Planning and Predicting** **Greater Depth**	To suggest what might happen To suggest simple ways to test ideas To organise a group of others to carry out an investigation/ observation	To suggest, with help, some ideas and questions To think about how to collect evidence To suggest what might happen To think about and discuss whether comparisons and tests are fair / unfair To choose own equipment and explain choices	To respond to suggestions To put forward ideas, with help, about testing To make predictions To consider, with help, what constitutes a fair test To plan and carry out, with help, a fair test To plan how to perform a task varying one factor while keeping the others the same	To recognise why it is important to collect data to answer questions To suggest questions that can be tested To put forward ideas about testing and make predictions To consider, with help, what constitutes a fair test To decide on an appropriate approach in their own investigations to answer questions	To recognise that scientific ideas are based on evidence and creative thinking To make predictions based on scientific knowledge To suggest how to collect evidence To select suitable equipment To explain predictions in writing using scientific knowledge	To consider how scientists have combined evidence from observation and measurement with creative thinking to suggest new ideas and explanations for phenomena To make predictions based on scientific knowledge and understanding To suggest methods of testing including a fair test and how to collect evidence, ensuring it is sufficient and appropriate

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						To explain predictions in writing using scientific knowledge and understanding
Investigating and Observing **Greater Depth**	To make observations using appropriate senses To explore using the five senses To make simple comparisons and groupings To communicate observations orally, in drawing, labelling, simple writing and using ICT	To make observations and comparisons using simple equipment, following simple instructions To use first-hand experience and, with help, simple information sources to answer questions To begin to recognise when a test or comparison is fair / unfair	To make observations and comparisons To measure length, volume of liquid and time in standard measure using simple measuring equipment To use first-hand experience and simple information sources to answer questions To explain when a test or comparison is unfair To vary one factor while keeping the others the same when performing a test	To make relevant observations and comparisons To make measurement of temperature, time and force, as well as measurement of length To begin to think about why measurement of length should be repeated To carry out a fair test, with help, recognising and explaining why it is fair To explain which result should be chosen from a set of repeated results	To carry out a fair test, explaining why it is fair To understand why observations and measurement need to be repeated To select information from provided sources To use averages to gain one representative result from a set of repeated results	To carry out fair test identifying key factors to be considered To make a variety of relevant observations and measurement using simple apparatus correctly To decide when observations and measurements need to be checked, by repeating, to give more reliable data To select information from a range of sources To understand the difference in how to investigate quantitative and qualitative data
Recording, Analysing and Evaluating **Greater Depth**	To communicate findings in simple ways To collect evidence to try and answer a question To use charts to communicate findings To explain whether what happened was what they expected	To record findings in simple ways including tables, graphs To say whether what happened was what was expected To use comparative adjectives to explain patterns, e.g. bigger, smaller, greater, higher	To communicate findings in a variety of ways To say whether what happened was what was expected and draw simple conclusions To identify, with help, simple patterns and suggest explanations To lead a group to communicate	To explain what the evidence shows in a scientific way and whether it supports predictions To suggest improvements in their work To suggest improvements in their work, giving reasons	To communicate findings in a variety of ways To identify simple trends and patterns To communicate findings in tables, bar charts and line graphs, whilst making appropriate use of ICT	To communicate findings in tables, bar charts and line graphs, whilst making appropriate use of ICT To identify trends and results that do not appear to fit the pattern To provide explanations for differences in

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			findings to the rest of the class, using a variety of resources		To identify trends and patterns and offer explanations for these To draw conclusions and communicate them in appropriate scientific language To suggest improvements in their work, giving reasons To begin to explain anomalous data To draw own bar and line graphs to represent results	observations and measurement To draw conclusions and communicate them in appropriate scientific language To make practical suggestions for improving methods in their work giving suggestions To explain anomalous data with a variety of reasons To show how interpretation of evidence leads to new ideas