Coleham Primary School SCIENCE Progression (cumulative knowledge) 2025-26

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Units studied:	• ***Animals (excl. humans)*** • ***Animals (incl. humans)*** • ***Living Things & Their Habitats*** • ***Seasonal Changes*** • ***Materials, Forces, Light, Sound, Earth & Space (as exploratory topics)***	• ***Animals, Including Humans*** • ***Seasonal Changes (throughout)*** • ***Materials***	• ***Living Things & Their Habitats*** • ***Plants*** • ***Materials***	• ***Animals, Including Humans*** • ***Plants*** • ***Forces & Magnets*** • ***Light*** • ***Rocks***	• ***Animals, Including Humans*** • ***Living Things & Their Habitats*** • ***Electricity*** • ***States Of Matter*** • ***Sound***	• ***Animals, Including Humans*** • ***Living Things & Their Habitats*** • ***Materials*** • ***Forces*** • ***Earth & Space***	• ***Animals, Including Humans*** • ***Living Things & Their Habitats*** • ***Light*** • ***Electricity*** • ***Evolution & Inheritance***
WORKING SCIENTIFICALLY	• To talk about features of their own environment. • To make observations of materials, their environment and the animals/plants in it. • To talk about changes and explain why some things occur	• To ask and answer simple questions about the knowledge being taught • To make observations, including using instruments • To perform simple tests • To classify and identify • To record data/information • To begin suggesting reasons for results in tests **Not every aspect of the Working Scientifically requirements is expected in every area of study, but opportunities will be used when appropriate and often.*		*As previous years, and:* • To ask more relevant questions about the content being taught • To answer questions using comparative and fair tests • To be aware of variables and the need to control them • To make systematic observation and measurement, using measuring equipment and standard units • To present collected data to inform • Use charts and diagrams to explain concepts • To report findings from investigations • To draw conclusions from results, using scientific knowledge and vocabulary • To identify differences, similarities and changes to scientific ideas. **Not every aspect of the Working Scientifically requirements is expected in every area of study, but opportunities will be used when appropriate and often.*		*As previous years, and:* • To plan their investigations and scientific enquiries • To increase the accuracy of measurement in investigations • To recognise and control variables independently • To use graphs, charts, flow diagrams, classification keys, tables and scatter graphs to represent information • To make predictions using test data and set up further comparative tests • To make conclusions, explaining causal relationships and comment on the reliability of a test's accuracy • To identify scientific evidence that has been used to support or refute ideas. **Not very aspect of the Working Scientifically requirements is expected in every area of study, but opportunities will be used when appropriate and often.*	
ANIMALS, INCLUDING HUMANS	• Recognise some environments that are different to the one in which they live • Name and describe people who are familiar to them • See themselves as a valuable individual. • Manage their own needs • Know and talk about the different factors that support their overall health and wellbeing: regular physical activity; healthy eating; tooth brushing; sensible amounts of 'screen time'; having a good sleep routine; being a safe pedestrian.	• 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.		• 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. • Identify that humans and some other animals have skeletons and muscles for support, protection and movement.	• Describe the simple functions of the basic parts of the digestive system in humans. • Identify the different types of teeth in humans and their simple functions. • Construct and interpret a variety of food chains, identifying producers, predators and prey.	• Describe the changes as humans develop to old age.	• Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. • Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. • Describe the ways in which nutrients and water are transported within animals, including humans
LIVING THINGS AND THEIR HABITATS	• Draw information from a simple map. • Explore the natural world around them. • Describe what they see, hear and feel whilst outside. • Recognise some environments that are different to the one in which they live.		• 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		• Recognise that living things can be grouped in a variety of ways. • Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. • Recognise that environments can change and that this can sometimes pose dangers to living things	• Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird • Describe the life process of reproduction in some plants and animals.	• 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. • Give reasons for classifying plants and animals based on specific characteristics

			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				
SEASONAL CHANGES	• Explore the natural world around them. • Describe what they see, hear and feel whilst outside. • Understand the effect of changing seasons on the natural world around them	• Observe changes across the four seasons. • Observe and describe weather associated with the seasons and how day length varies					
PLANTS	*(see: living things & habitats)*	• Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. • Identify and describe the basic structure of a variety of common flowering plants, including trees.	• Observe and describe how seeds and bulbs grow into mature plants. • Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	• Identify and describe the functions of different parts of flowering plants: roots; stem/trunk; leaves; and flowers. • 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. • Investigate the way in which water is transported within plants • Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal			
MATERIALS	• Explore the natural world around them. • Describe what they see, hear and feel whilst outside.	• 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. • 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. • Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching			• 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. • Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution. • Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating • Give reasons, based on evidence from comparative and fair tests, for the	

						particular uses of everyday materials, including metals, wood and plastic. • Demonstrate that dissolving, mixing and changes of state are reversible changes. • 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 on bicarbonate of soda	
FORCES AND MAGNETS	• Explore the natural world around them. • Describe what they see, hear and feel whilst outside.			• Compare how things move on different surfaces. • Notice that some forces need contact between two objects, but magnetic forces can act at a distance. • Observe how magnets attract or repel each other and attract some materials and not others. • 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. • Describe magnets as having two poles. • Predict whether two magnets will attract or repel each other, depending on which poles are facing.		• Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. • Identify the effects of air resistance, water resistance and friction that act between moving surfaces. • Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect	
LIGHT	• Describe what they see, hear and feel whilst outside.			• Recognise that they need light in order to see things, and that dark is the absence of light. • Notice that light is reflected from surfaces. • Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. • Recognise that shadows are formed when the light from a light source is blocked by an opaque object. • Find patterns in the way that the size of shadows change.			• Recognise that light appears to travel in straight lines. • 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. • 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. • Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them
ELECTRICITY					• Identify common appliances that run on electricity. • Construct a simple series electrical circuit, identifying and naming its		• Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.

					basic parts, including cells, wires, bulbs, switches and buzzers. • 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. • Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. • Recognise some common conductors and insulators, and associate metals with being good conductors.		• 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. • Use recognised symbols when representing a simple circuit in a diagram.
EARTH AND SPACE	• Explore the natural world around them. • Describe what they see, hear and feel whilst outside.					• Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. • Describe the movement of the Moon relative to the Earth. • Describe the Sun, Earth and Moon as approximately spherical bodies. • Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky	
EVOLUTION AND INHERITANCE							• Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. • Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. • Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.
ROCKS				• Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. • Describe in simple terms how fossils are formed when things that have lived are trapped within rock. • Recognise that soils are made from rocks and organic matter.			
STATES OF MATTER					• Compare and group materials together, according to whether they are solids, liquids or gases. • 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). • Identify the part played by evaporation and condensation in		

					the water cycle and associate the rate of evaporation with temperature.		
SOUND	• Describe what they see, hear and feel whilst outside.				• Identify how sounds are made, associating some of them with something vibrating. • Recognise that vibrations from sounds travel through a medium to the ear. • Find patterns between the pitch of a sound and features of the object that produced it. • Find patterns between the volume of a sound and the strength of the vibrations that produced it. • Recognise that sounds get fainter as the distance from the sound source increases.		