

Science Skills and Knowledge Coverage 2025-2026

Year 1/2	
Autumn – Animals including Humans	
• To name a variety of common animals, including fish, amphibians, reptiles, birds and mammals.	
• To identify a variety of common animals, including fish, amphibians, reptiles, birds and mammals.	
• To name a variety of common animals that are carnivores, herbivores and omnivores.	
• To identify 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, reptiles, birds and mammals including pets).	
• To name the basic parts of the human body (head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth).	
• To identify, draw and label the basic parts of the human body.	
• To identify and classify which part of the human body is associated with each sense.	
Spring – Plants	
• To name a variety of common wild and garden plants, including deciduous and evergreen trees. (daffodil, daisy, apple tree, oak tree, pine tree).	
• To use the local environment to identify a variety of common wild and garden plants, including deciduous and evergreen trees.	
• To identify the basic structures of variety of common flowering plants, including trees (leaves, flowers, petals, fruit, roots, trunk, branches, stem, bulb).	
• To describe the basic structures of a variety of common flowering plants, including trees (leaves, flowers, petals, fruit, roots, trunk, branches, stem, bulb).	
• To observe closely using simple equipment (hand lenses).	
Summer – Everyday Materials	
• To name a variety of everyday materials (wood, plastic, glass, metal, water, rock).	
• To identify a variety of everyday materials.	
• To distinguish between an object and the material from which it is made.	
• To describe the simple physical properties of a variety of everyday materials (hard, soft, stretchy, stiff, shiny, dull, rough, smooth, bendy, not bendy, waterproof, not waterproof, absorbent, not absorbent, opaque, transparent).	
• Ask simple questions and recognise they can be answered in different ways.	
• Perform simple tests (What is the best material for an umbrella?).	
• To use their observations and ideas to suggest answers to questions.	

Year 3/4	
Autumn 1 – Animals including humans	
• Name the basic parts of the digestive system (mouth, tongue, teeth, oesophagus, stomach, intestine).	
• Describe the simple functions of the basic parts of the digestive system.	
• Name the different types of teeth in humans (incisors, canines, molars).	
• Identify the simple function of different types of teeth.	
Autumn 2 – Forces and Magnets	
• 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 and repel each other.	
• Observe how magnets attract some materials and not others.	
• Compare and group together a variety of everyday materials on the basis of whether that 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.	
• Set up simple practical enquiries and fair tests (Exploring the strength of different magnets and find a way to compare them).	
• Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.	
• Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.	
Spring 1 – 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.	
• Measure and research the temperature that this happens in degrees with a thermometer (chocolate, butter or cream).	
• Associate the rate of evaporation with temperature (Puddle in a playground or washing on a line)	
Spring 2 – Sound	
• Identify how sounds are made associating some of them with something vibrating.	
• Recognise that vibrations from sound 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. (Dropping a weight from different heights on a drum)	
Summer 1 - Living Things and their Habitats	
• Construct a variety of food chains, identifying producers, predators and prey.	
• Interpret a variety of food chains.	

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| <ul style="list-style-type: none">• Recognise that living things can be grouped in a variety of ways. |
| <ul style="list-style-type: none">• Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. |
| <ul style="list-style-type: none">• Recognise that environments can change and this can sometimes pose danger to living things (positive effect of garden pond and the negative impact of deforestation). |

Summer 2 – Significant Scientific Discoveries
Gerald Durrell, Joseph Priestly, Lord Kelvin

Year 5/6	
Autumn 1 – All Living Things and their Habitats	
• Describe the differences in the life cycle of a mammal, an amphibian and insect and a bird (Comparing the life cycle of plant and animals in their local environment to the Amazon rainforest).	
• Describe the life process of reproduction in some plants and animals.	
• Describe the changes as humans develop to old age.	
Autumn 2 – Properties and Changes of Materials	
• Compare and group together everyday materials on the basis of their properties (hardness, solubility, transparency, conductivity and response to magnets)	
• Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from solution.	
• Use knowledge of solids, liquids and gases to decide how mixtures might be separated (filtering, sieving, evaporation)	
• Demonstrate that dissolving, mixing and changes of state are reversible changes.	
• Explain that some changes result in the formation of new materials and this kind of change is not usually reversible (changes associated with burning and the action of acid on bicarbonate of soda)	
• Give evidence based on evidence from comparative and fair tests for the particular uses of everyday materials. (Which materials would be the most effective for a warm jacket?)	
• Plan scientific enquiries to answer questions recognising and controlling variables.	
• Take measurements with increasing accuracy and precision (thermometer) taking repeat findings where appropriate.	
• Report and present findings from enquiries including conclusions, causal relationships and explanation of results in written forms.	
Spring 1 – Forces	
• Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.	
• Identify the effect of air resistance, water resistance and friction that act between moving surfaces.	
• Plan different types of scientific enquiries to answer questions, including recognising and controlling variables (Air resistance on parachutes)	
• Take measurements using a stopwatch with increasing accuracy taking repeat readings where appropriate.	
• Record data and results using tables and bar charts.	
• Use test results to make predictions to set up further comparative and fair tests.	
• Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	

Spring 2 – Electricity
• Use recognised symbols when representing a simple circuit in a diagram (motor, buzzer, wire, bulb, switch, battery).
• Compare and give variations in how components function including the brightness of a bulb, the loudness of buzzers and the on/off position of switches.
• To plan different types of scientific enquiries to answer questions recognising and controlling variables where necessary (voltage of the bulb affect the brightness)
• Take measurements using a range of scientific equipment (datalogger) with increasing accuracy and precision taking repeat findings when appropriate.
• Associate the brightness of a lamp with the number and voltage of cells used in a circuit.
• To report and present findings from enquiries using conclusions, causal relationships and explanations of and a degree of trust in the results.
Summer 1 – Animals Including Humans
• To name the main parts of the human circulatory system (heart, lungs, arteries, veins, capillaries).
• To identify the main parts of the human circulatory system.
• To describe the functions of the heart, blood vessels and blood.
• To describe the ways in which nutrients and water are transported within humans.
• To take repeat findings where necessary (Do narrowing arteries affect our bodies?).
• To identify scientific evidence that has been used to support or refute ideas or arguments.
• To recognise the impact of exercise, drugs and lifestyle on the way the bodies function.
Summer 2 – Light
• To recognise that light appears to travel in straight lines.
• To record data using scientific diagrams and labels (ray diagrams).
• To explain that we see things before light travels from light sources to our eyes or to light sources to objects and then 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.