








Year 1 Science Coverage



Plants	Seasons	Animals including Humans	Everyday Materials
P1 I can identify and name a variety of common wild and garden plants, including deciduous and evergreen.	S1 I can observe changes across the four seasons.	A1 I can identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.	M1 I can distinguish between an object and the material from which it is made
P2 I can identify and describe the basic structure of a variety of common flowering plants, including trees.	S2 I can observe and describe weather associated with the seasons and how day length varies	A2 I can identify and name a variety of common animals that are carnivores, herbivores and omnivores	M2 I can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.
		A3 I can describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).	M3 I can describe the simple physical properties of a variety of everyday materials.
		A4 I can identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.	M4 I can compare and group together a variety of everyday materials on the basis of their simple physical properties.
Scientist to study: Maria Sibylla Merian (German artist, scientific illustrator, and naturalist)	Scientist to study: Aristotle said humans have five senses. Leonardo Da Vinci (Anatomical drawing)		Scientist to study: Charles Macintosh
Working Scientifically skills Making observations and recording information. Making predictions and observations. Naming and observing. Asking questions.	Working Scientifically skills Observing Setting up tests and recording data. Observing, measuring and recording data.	Working Scientifically skills Asking questions and making observations. Making observations and recording data. Setting up simple tests and recording data. Making observations and communicating information.	Working Scientifically skills Asking questions and recording data. Observing and asking questions. Making observations and grouping. Setting up a test and communicating results. Sentence stem: The best material for a ... is ... because ...

	Unit	Key End Points	Vocabulary	Prior learning	Future learning	Common misconceptions
Autumn 1	Everyday Materials M1-4	By the end of this unit children will be able to: Talk about and notice objects throughout the year. Talk about and describe different objects/materials. Talk about and describe objects that we use every day. Talk about how everyday objects are made (in a simple way). Compare objects.	Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull,	Explore collections of materials with similar and/or different properties. (EYFS) Talk about the differences between materials and changes they notice. Explore how different	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. (Y2 - Uses of everyday materials) Find out how the shapes of solid objects made	Some children may think: • only fabrics are materials • only building materials are materials • only writing materials are materials • the word 'rock' describes an object rather than a material

		Talk about how we look after our objects or belongings.	see-through, not see-through	materials sink and float. (EYFS)	from some materials can be changed by squashing, bending, twisting and stretching. (Y2 - Uses of everyday materials)	• 'solid' is another word for hard.
Autumn 2	<p style="text-align: center;">Seasons S1&2</p> <div style="background-color: #e91e63; color: white; padding: 5px; margin-bottom: 5px;"> <p>Observation over time Observing changes that occur over a period of time ranging from minutes to months. </p> </div> <div style="background-color: #8bc34a; color: white; padding: 5px; margin-bottom: 5px;"> <p>Research Using secondary sources of information to answer scientific questions. </p> </div> <div style="background-color: #00bcd4; color: white; padding: 5px;"> <p>Pattern-seeking Identifying patterns and looking for relationships in enquiries where variables are difficult to control. </p> </div>	<p>By the end of this unit children will be able to: Name the seasons and the time of year associated with them. Talk about and notice the seasons throughout the year. Talk about and describe the seasons. Talk about what we do to adapt to different seasons e.g. clothes, activities, physical environment, food Talk about the plants and animals of differ</p>	Weather (sunny, rainy, windy, snowy etc.) Seasons (winter, summer, spring, autumn) Sun, sunrise, sunset, day length	Understand the key features of the life cycle of a plant and an animal. (EYFS) 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. (EYFS)	Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. (Y3 - Light) Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky. (Y5 - Earth and space)	Some children may think: <ul style="list-style-type: none"> • it always snows in winter • it is always sunny in the summer • there are only flowers in spring and summer • it rains most in the winter.
Spring	<p style="text-align: center;">Animals including humans A1-4</p> <div style="background-color: #e91e63; color: white; padding: 5px; margin-bottom: 5px;"> <p>Identifying, grouping and classifying Making observations to name, sort and organise items. </p> </div> <div style="background-color: #00bcd4; color: white; padding: 5px; margin-bottom: 5px;"> <p>Pattern-seeking Identifying patterns and looking for relationships in enquiries where variables are difficult to control. </p> </div> <div style="background-color: #8bc34a; color: white; padding: 5px;"> <p>Research Using secondary sources of information to answer scientific questions. </p> </div>	<p>By the end of this unit children will be able to: Talk about and describe their body. Talk about how they are the same as and different from others e.g. physical appearance, things you like, things you believe, how we do things etc. Talk about their senses and how they use them in everyday life. Talk about how they've changed during year one Measure themselves over the year and compare to others Talk about animals that they are interested in. Talk about and describe different animals. Talk about what animals eat. Talk about where animals live. Compare animals Measure animals</p>	Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves Names of animals experienced first-hand from each vertebrate group Parts of the body Senses – touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear and tongue	Use all their senses in hands-on exploration of natural materials. (EYFS) Begin to make sense of their own life-story and family's history. (EYFS) Understand the key features of the life cycle of a plant and an animal. (EYFS) Begin to understand the need to respect and care for the natural environment and all living things. (EYFS)	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. (Y2 - Living things and their habitats) Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals. (Y6 - Living things and their habitats) Give reasons for classifying plants and animals based on specific characteristics. (Y6 - Living things and their habitats)	Some children may think: <ul style="list-style-type: none"> • only four-legged mammals, such as pets, are animals • humans are not animals • insects are not animals • all 'bugs' or 'creepy crawlies', such as spiders, are part of the insect group • amphibians and reptiles are the same
Summer 1	<p style="text-align: center;">Seasons S1&2</p> <div style="background-color: #e91e63; color: white; padding: 5px;"> <p>Observation over time Observing changes that occur over a period of time ranging from minutes to months. </p> </div>	<p>By the end of this unit children will be able to: Name the seasons and the time of year associated with them.</p>	Weather (sunny, rainy, windy, snowy etc.) Seasons (winter, summer, spring,	Understand the key features of the life cycle of a plant and an animal. (EYFS)	Recognise that light from the sun can be dangerous and that there are ways	Some children may think: <ul style="list-style-type: none"> • it always snows in winter

	<p>Research Using secondary sources of information to answer scientific questions. </p> <p>Pattern-seeking Identifying patterns and looking for relationships in enquiries where variables are difficult to control. </p> <p>Comparative / fair testing Changing one variable to see its effect on another, whilst keeping all others the same. </p>	<p>Talk about and notice the seasons throughout the year. Talk about and describe the seasons. Talk about what we do to adapt to different seasons e.g. clothes, activities, physical environment, food Talk about the plants and animals of different seasons and what they do. Compare seasons.</p>	<p>autumn) Sun, sunrise, sunset, day length</p>	<p>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. (EYFS)</p>	<p>to protect their eyes. (Y3 - Light) Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky. (Y5 - Earth and space)</p>	<ul style="list-style-type: none"> • it is always sunny in the summer • there are only flowers in spring and summer • it rains most in the winter.
<p>Summer 2</p>	<p style="text-align: center;">Plants P1&2</p> <p>Observation over time Observing changes that occur over a period of time ranging from minutes to months. </p> <p>Research Using secondary sources of information to answer scientific questions. </p> <p>Comparative / fair testing Changing one variable to see its effect on another, whilst keeping all others the same. </p> <p>Identifying, grouping and classifying Making observations to name, sort and organise items. </p>	<p>By the end of this unit children will be able to: Talk about and notice plants throughout the year. Talk about and describe different plants. Talk about what plants we eat. Talk about how to grow plants. Compare plants. Talk about how they can look after plants</p>	<p>Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud Names of trees in the local area Names of garden and wild flowering plants in the local area</p>	<p>Plant seeds and care for growing plants. (EYFS) Begin to understand the need to respect and care for the natural environment and all living things. (EYFS)</p>	<p>Observe and describe how seeds and bulbs grow into mature plants. (Y2- Plants) Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. (Y2 - Plants) Identify and name a variety of plants and animals in their habitats, including microhabitats. (Y2 - Living things and their habitats) Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. (Y3 - Plants) Investigate the way in which water is transported within plants. (Y3 Plants)</p>	<p>Some children may think:</p> <ul style="list-style-type: none"> • plants are flowering plants grown in pots with coloured petals and leaves and a stem • trees are not plants • all leaves are green • all stems are green • a trunk is not a stem • blossom is not a flower.