Progression in Science

Strand	EYFS		KS1		Moving into KS2
	Preschool	Reception	Year 1	Year 2	
Plants and Living Things	• Explore and investigate plants, animals and other living things in their immediate environment. • Notice simple similarities, differences and changes in the natural world. • Begin to care for plants and animals.	• Explore and observe a variety of plants and animals in their local environment. • Notice and describe similarities, differences and changes in plants and animals. • Observe how plants and animals change over time. • Begin to understand how to care for plants, animals and the natural environment. • Compare familiar environments and the plants and animals found within them.	• Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. • Identify and describe the basic structure of common flowering plants and trees. • Observe plants closely and compare similarities and differences. • Observe and record how plants change over time.	• Recognise that living things can be living, dead or have never been alive. • Identify and compare plants and animals in a variety of habitats, including microhabitats. • Describe how habitats provide for the basic needs of different plants and animals. • Recognise that plants and animals depend on each other. • Describe simple food chains and identify different sources of food. • Observe and describe how seeds and bulbs grow into mature plants. • Know that plants need water, light and a suitable temperature to grow and stay healthy.	Develop understanding of living things, their habitats and life processes, using observations and evidence to describe patterns, relationships and change.
Animals, Including Humans	• Explore and observe a variety of animals, including pets and animals in the local environment. • Notice simple similarities and differences between animals. • Begin to recognise that animals have different needs. • Develop care and respect for living animals.	• Explore and identify a variety of animals, including those familiar and unfamiliar to them. • Notice and describe similarities and differences between animals. • Observe how animals change as they grow. • Begin to understand that animals have basic needs, such as food, water and shelter. • Recognise that people and other animals are living things.	• Identify and name a variety of common animals, including fish, amphibians, reptiles, birds and mammals. • Identify and name common animals that are carnivores, herbivores and omnivores. • Describe and compare the structure of a variety of common animals. • Identify, name, draw and label basic parts of the human body. • Say which part of the body is associated with each sense.	• Notice that animals, including humans, have offspring which grow into adults. • Describe the basic needs of animals, including humans, for survival. • Describe the importance of exercise, eating the right amounts of different types of food, and hygiene. • Describe how humans change as they grow from young to old.	Develop understanding of how animals, including humans, grow, survive and stay healthy, using evidence from observations to explain similarities, differences and change.

Strand	EYFS		KS1		Moving into KS2
	Preschool	Reception	Year 1	Year 2	
Materials and Their Properties	• Explore and investigate a range of natural and everyday materials. • Notice and describe simple similarities and differences between materials. • Explore how materials can be used, moved and combined. • Begin to choose materials for particular purposes during play and creative activities.	• Explore and compare a range of natural and everyday materials. • Describe simple properties and differences between materials. • Explore how materials can be changed through actions such as squashing, stretching, bending and melting. • Choose materials for particular purposes and explain simple reasons for their choices.	• 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 and compare simple properties of materials. • Group materials according to their observable properties. • Identify and compare the suitability of different materials for particular uses.	• Identify and compare the suitability of a variety of everyday materials for particular uses. • Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. • Explain how the properties of materials make them suitable for particular purposes. • Compare the uses of materials in different objects and contexts.	Compare and explain the properties and uses of materials, using observations and evidence to identify patterns and make predictions.
Seasonal Change, Weather and the Natural World	• Explore the natural environment throughout the year. • Notice and talk about changes in the weather and natural world. • Explore how weather affects what they wear, do and see. • Begin to notice seasonal changes in plants, animals and the environment.	• Observe and describe changes in the natural environment across the seasons. • Notice and describe changes in weather, temperature and daylight. • Recognise that different seasons have different characteristics. • Observe how seasonal changes affect plants, animals and people. • Make simple observations and comparisons about the natural world over time.	• Observe changes across the four seasons. • Observe and describe weather associated with the seasons and how day length varies. • Recognise that weather changes from day to day and across the year. • Make regular observations and record simple changes in weather and daylight.	• Revisit and apply understanding of seasonal and weather changes when observing plants, animals and their habitats, making comparisons and identifying patterns over time.	Use observations over time to identify and describe patterns and changes in the natural world, making increasingly informed predictions and explanations.

Strand	EYFS		KS1		Moving into KS2
	Preschool	Reception	Year 1	Year 2	
Scientific Enquiry and Working Scientifically	• Explore the natural and physical world through hands-on investigation. • Notice and talk about what they see, hear, feel and observe. • Ask questions and show curiosity about how things work. • Make simple observations and communicate what they have noticed.	• Explore objects, materials, living things and natural phenomena through purposeful investigation. • Ask questions and make predictions based on their experiences. • Make observations using their senses and simple equipment. • Notice similarities, differences and changes. • Talk about what they have found out and share their observations with others.	• Ask simple questions about the world around them. • Observe closely, using simple equipment where appropriate. • Perform simple tests and make comparisons. • Identify and classify objects, materials and living things. • Record observations and simple measurements in different ways. • Use their observations and ideas to suggest answers to questions. • Communicate what they have found out using simple scientific language.	• Ask relevant questions and use different types of scientific enquiry to answer them. • Make careful observations and use simple equipment to gather evidence. • Perform simple comparative tests and begin to recognise when a test is fair. • Group and classify objects, materials and living things using their observations. • Gather and record data to help answer questions. • Use simple tables, charts and diagrams to record and communicate findings. • Use observations and evidence to draw simple conclusions and explain what they have found out. • Identify patterns and use them to make simple predictions.	Plan and carry out increasingly systematic investigations, selecting appropriate ways to observe, measure, record and communicate findings, and using evidence to identify patterns and draw conclusions.

Vocabulary Progression in Science

Key vocabulary is revisited and consolidated across year groups, with new vocabulary introduced progressively as pupils' knowledge and understanding develops. Repetition of key terms is intentional and supports secure understanding and confident use of vocabulary.

Aspect	EYFS		KS1		Moving into KS2
	Preschool	Reception	Year 1	Year 2	
Plants and Living Things	plant, flower, tree, leaf, seed, grow, alive, animal	plant, flower, tree, leaf, root, seed, grow, living, animal, habitat, life cycle	plant, flower, tree, leaf, root, stem, petal, fruit, seed, bulb, trunk, branch, deciduous, evergreen, habitat, life cycle	living, dead, never alive, habitat, microhabitat, depend, food chain, life cycle, seed, bulb, grow, water, light, temperature	Continue to broaden and deepen scientific vocabulary, using increasingly precise terminology to describe observations, explain ideas, communicate findings and discuss scientific concepts independently.
Animals, Including Humans	animal, baby, grow, body, head, eyes, ears, nose, mouth, legs, wings	animal, baby, young, adult, grow, body, head, eyes, ears, nose, mouth, legs, wings, senses, habitat, life cycle	animal, mammal, fish, amphibian, reptile, bird, carnivore, herbivore, omnivore, body, head, neck, arms, elbows, hands, fingers, legs, knees, feet, face, ears, eyes, nose, mouth, teeth, skin, sight, hearing, smell, touch, taste	offspring, young, adult, grow, life cycle, basic needs, food, water, air, shelter, exercise, healthy, hygiene, nutrition, food, balanced, diet	
Materials and Their Properties	material, hard, soft, smooth, rough, wet, dry, heavy, light, wood, plastic	material, hard, soft, smooth, rough, wet, dry, bend, stretch, squash, wood, plastic, metal, glass	object, material, wood, plastic, glass, metal, water, rock, hard, soft, stretchy, stiff, shiny, dull, rough, smooth, waterproof, absorbent, transparent, opaque, flexible, rigid, suitable	material, object, property, suitable, purpose, use, waterproof, absorbent, flexible, rigid, transparent, opaque, bend, stretch, squash, twist	
Seasonal Change, Weather and the Natural World	weather, sunny, rainy, windy, hot, cold, day, night, season, spring, summer, autumn, winter	weather, sunny, rainy, windy, cloudy, hot, cold, warm, cool, day, night, season, spring, summer, autumn, winter, change	season, spring, summer, autumn, winter, weather, sunny, rainy, windy, cloudy, hot, cold, temperature, day, night, daylight, change	season, weather, temperature, daylight, change, pattern, observe, compare	
Scientific Enquiry and Working Scientifically	notice, look, see, explore, find, change, same, different, question	notice, observe, explore, investigate, question, predict, compare, same, different, change, find out	observe, question, investigate, predict, compare, group, classify, test, measure, record, results, equipment	question, investigate, predict, compare, classify, test, fair test, measure, record, results, evidence, pattern, conclusion, explain	