Science Curriculum Statements and Progression Document

No great discovery was ever made without a bold guess- Isaac Newton

Curriculum Intent:

At Langley Fitzurse, we intend our children to consider themselves as scientists. We encourage them to have an enquiring mind; asking questions and developing their thinking skills through an interesting, enquiry-based Science curriculum. It is our intention to recognise the importance of Science in every aspect of daily life. We give the teaching and learning of Science the prominence it requires, whilst using our school vision to ensure we produce resilient scientists who want to amaze, excite and inspire. Science continues to change our lives and we aim to provide children with the knowledge and skills to impact positively on the world we live in and its future.

We aim to:

- Increase pupils' knowledge and understanding of our world.
- Develop skills associated with Science as a process of enquiry.
- Develop and foster a natural scientific curiosity.
- Encourage respect for living organisms and the physical environment.
- Provide opportunities for evaluation of evidence.
- Enable children to become enquiry-based learners.
- Develop a passion for Science and its place within past, present and future technologies.

Curriculum Implementation:

As a mixed age school, we, at Langley Fitzurse, have developed a two-year rolling programme that enables a progression of knowledge and skills from KS1 through to UKS2. Our approach to implementing the curriculum, ensures that our children build a solid foundation for Science learning in EYFS through enquiry and exploration, and continue to build their skills and knowledge as they progress through the school.

- Progression of curriculum in line with the National Curriculum.
- Two- year rolling programme ensures curriculum coverage.
- Teaching and learning promote practical, investigative opportunities within lessons.
- Prior knowledge is assessed to give an accurate starting point and an opportunity for teachers to fill gaps
- Opportunities to build upon prior learning, make connections and develop subject specific language.
- Opportunities to use a range of resources to develop knowledge and understanding of how things work.
- Supporting learners to be open-minded, perseverant and curious.

Curriculum Impact:

At Langley Fitzurse Primary School, we will monitor and assess the teaching and learning of Science to evaluate its impact on our children.

- We will use pupil voice to assess and celebrate the children's awareness of what it means to be a scientist and the scientific knowledge they have learnt in their time at the school.
- We will plan timely book looks to ensure quality provision, high standards and to celebrate the children's learning.
- We will visit classrooms to observe the teaching and share the learning with the children, to ensure we have high quality Science teaching.

As a result of our approach to the implementation of Science at Langley Fitzurse, our monitoring will show that our children:

- Are amazed, excited and inspired by Science.
- Gain an enthusiasm and enjoyment of scientific learning and discovery.
- Retain knowledge that is pertinent to Science with a real-life context.
- Develop and use confidently a rich scientific vocabulary.
- Are confident and resilient enough to question ideas and reflect upon their knowledge.
- Work collaboratively and practically to investigate and experiment.
- Explain the process they have taken and be able to reason scientifically.
- Have high aspirations which will see them through to further study.

Langley Fitzurse C of E Primary School Science Coverage and Progression of skills

Science Curriculum Coverage (Years A/C) (2024-2025/ 2026/27)

	Autumn Term		Spring Term		Summer Term	
EYFS	**Continuous provision provides opportunity for exploration, questioning and experiential learning and will be enhanced to enable more targeted learning.** Talking about things they have observed	**Continuous provision provides opportunity for exploration, questioning and experiential learning and will be enhanced to enable more targeted learning.** **Field and Forest** Children will learn to explore the natural world **Seasonal change** Children will learn about Winter	**Continuous provision provides opportunity for exploration, questioning and experiential learning and will be enhanced to enable more targeted learning.** **Field and Forest** Children will learn to explore the natural world **Seasonal change** Children will learn about Spring- process and change	**Continuous provision provides opportunity for exploration, questioning and experiential learning and will be enhanced to enable more targeted learning.** **Field and Forest** Children will learn to explore the natural world, identifying features of living things as animals with and without legs. **Being my best** Children will learn about the benefits of physical activity, healthy eating, tooth brushing and sleep. Understand growth, decay & changes overtime, why things happen & work.	**Continuous provision provides opportunity for exploration, questioning and experiential learning and will be enhanced to enable more targeted learning.** **Field and Forest** Children will learn to explore the natural world **Seasonal change** Children will learn about Summer- process and change	**Continuous provision provides opportunity for exploration, questioning and experiential learning and will be enhanced to enable more targeted learning.** **Field and Forest** Children will learn to explore the natural world **Seasonal change** Children will learn about Summer- process and change
Key Stage 1	**Everyday materials** Children will learn to identify, classify and describe the everyday materials around them.	**Identifying plants** Children will learn to identify and describe different plants and trees.	**Arctic Science** Children will learn to identify Arctic animals and how they survive. Children will learn about ice and its properties.	**Living in Habitats** Children will learn the difference between living and nonliving things, then find out about habitats	**Super Scientists** Children will learn to about scientists and their discoveries while developing their own 'working scientifically' skills.	**Seasonal changes** Children will learn how weather and day length affect animals and humans.
Lower Key Stage 2	**Light and Shadow** Children will learn about how light travels, what shadows are, how the length and position of a shadow changes throughout the day.	**Sound** Children will learn what sound is and how it is made, travels, can be blocked and how different pitches can be attained.	**Electricity- circuits and conductors** Children will learn how to make simple circuits, learning the names of different components and how each of these works. Children will investigate insulators and conductors and use this knowledge to make a switch.	**Rocks, fossils and soils** Children will learn about different kinds of rocks and what they can be used for, explore a variety of soils and find out how they are formed, discover the fascinating world of fossils	**Animals Including Humans (Nutrition and the Skeleton)** Children will learn animals, including humans, need specific nutrition to help them move and grow, and how humans and some other animals have skeletons and muscles to help their bodies move.	**Animals Including Humans and their environments** Children will learn to identify a range of British plants and animals, and how to classify organisms, including the use of classification keys. They will also consider why organisms live in different habitats and the impact, both positive and negative, that humans can have on environments.
Upper Key Stage 2	**Seeing light** Children will learn about sources of light, shadows and light and how our eyes see.	**Properties and changes of materials** Children will learn to understand the differences between a variety of materials, and how materials can be mixed and dissolved, and reversibly and irreversibly	**Classification of living things** Children will learn about classifying animals, plants and micro-organisms with a detailed look at the Linnaeus classification system, how it works and how different species of organisms that are closely related can be identified.		**Electricity- changing circuits** Children will learn to investigate anomalous results, bulb brightness and how the thickness and length of a wire can affect how a circuit works	**Animals, including humans – Developing into old age** Children will learn about the human lifecycle, sexual reproduction and gestation, how young children grow and develop, the changes that occur during puberty as well as discovering

		changed.			about the changing needs of humans during old age.

Langley Fitzurse C of E Primary School Science Coverage and Progression of skills

Science Curriculum Coverage (Year B/D) (2025-2026/ 2027-28)

	Autumn Term		Spring Term		Summer Term	
EYFS	**Continuous provision provides opportunity for exploration, questioning and experiential learning and will be enhanced to enable more targeted learning.** Talking about things they have observed	**Continuous provision provides opportunity for exploration, questioning and experiential learning and will be enhanced to enable more targeted learning.** **Field and Forest** Children will learn to explore the natural world **Seasonal change** Children will learn about Winter	**Continuous provision provides opportunity for exploration, questioning and experiential learning and will be enhanced to enable more targeted learning.** **Field and Forest** Children will learn to explore the natural world **Seasonal change** Children will learn about Spring- process and change	**Continuous provision provides opportunity for exploration, questioning and experiential learning and will be enhanced to enable more targeted learning.** **Field and Forest** Children will learn to explore the natural world, identifying features of living things as animals with and without legs. **Being my best** Children will learn about the benefits of physical activity, healthy eating, tooth brushing and sleep. Understand growth, decay & changes overtime, why things happen & work.	**Continuous provision provides opportunity for exploration, questioning and experiential learning and will be enhanced to enable more targeted learning.** **Field and Forest** Children will learn to explore the natural world **Seasonal change** Children will learn about Summer- process and change	**Continuous provision provides opportunity for exploration, questioning and experiential learning and will be enhanced to enable more targeted learning.** **Field and Forest** Children will learn to explore the natural world **Seasonal change** Children will learn about Summer- process and change
Key Stage 1	**Animals including humans- my body** Children will learn to identify and name the different parts of the body and explore senses.	**Identifying animals** Children will learn about animals' needs and about carnivores, herbivores and omnivores.	**Everyday materials** Children will learn to identify the properties and uses of everyday materials	**Animals including humans- growth and survival** Children will learn about the human life cycle and the reproduction and survival needs of all animals.	**Dinosaur science** Children will learn to name a variety of dinosaurs and what they eat and about the life cycle of a Dinosaur.	**Observing and growing plants** Children will learn what plants need to grow, thrive and survive.
Lower Key Stage 2	**States of matter** Children will learn about differences between solids, liquids and gases, and how different materials can change state	**Forces and magnets** Children will learn about some forces, such as pushes and pulls, and magnetic materials	**Animals including humans- digestion, teeth and food chains** Children will learn about the human digestive system, teeth and animal food chains.		**How plants grow** Children will learn to identify the functions of the different parts of a plant, find out what plants need and explore how plants reproduce.	**What do Scientists do?** Children will learn about forensic scientists, zoologists, botanists.
Upper Key Stage 2	**Earth and Space** Children will learn about the movement of the Sun, Earth and Moon, day and night, seasons and phases of the Moon.	**Forces in action** Children will learn about the effects of gravity, friction, air and water resistance and build models to explore how pulleys, levers and gears work.	**Circulatory and Digestive Systems** Children will learn about nutrition, the importance of exercise, their hearts and the circulatory system.		**Living Things – Life Cycles, Reproduction in Plants and Animals** Children will learn about the processes of sexual and asexual reproduction in plants, sexual reproduction in animals, and investigate the differences in the life cycles of different animals.	**Inheritance and evolution** Children will learn about the characteristics passed from one generation to the next and how species have adapted to suit their environments.

Langley Fitzurse C of E Primary School Science Coverage and Progression of skills

Science Progression Maps

The table below demonstrates which statements from the 2020 Development Matters are prerequisite skills for Science within the national curriculum. The table outlines the most relevant statements taken from the Early Learning Goals in the EYFS statutory framework and the Development Matters age ranges for Three and Four-Year-Olds and Reception to match the programme of study for Science, including developing questioning and skills of enquiry. The most relevant statements for Science are taken from the following area of learning: Understanding the World, Communication and Language and Personal, Social and Emotional Development.

EYFS		
Three and Four-Year-Olds	**Communication and Language** **Personal, Social and Emotional Development** **Understanding the World**	• Understand why questions e.g. I wonder why the caterpillar got so fat? • Make healthy choices about food, drink, toothbrushing and activity • Use all their senses in hands-on exploration of natural materials. • Explore collections of materials with similar and/or different properties. • Talk about what they see, using a wide vocabulary. • Begin to make sense of their own life-story and family's history. • Explore how things work. • Plant seeds and care for growing plants. • Understand the key features of the life cycle of a plant and an animal. • Begin to understand the need to respect and care for the natural environment and all living things. • Explore and talk about different forces they can feel. • Talk about the differences between materials and changes they notice.
Reception	**Communication and Language** **Personal, Social and Emotional Development** **Understanding the World**	• Learn new vocabulary. • Ask questions to find out more and to check what has been said to them. • Articulate their ideas and thoughts in well-formed sentences. • Describe events in some detail. • Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. • Use new vocabulary in different contexts. • Know and talk about the different factors that support their overall health and wellbeing: • regular physical activity • healthy eating • toothbrushing • sensible amounts of 'screen time' • having a good sleep routine • being a safe pedestrian • Explore the natural world around them. • Describe what they see, hear and feel while they are outside. • Recognise some environments that are different to the one in which they live. • Understand the effect of changing seasons on the natural world around them.

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ELG	**Communication and Language** **Personal, Social and Emotional Development** **Understanding the World**	**Listening, Attention and Understanding** **Managing Self** **The Natural World**	• Make comments about what they have heard and ask questions to clarify their understanding. • Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices. • Explore the natural world around them, making observations and drawing pictures of animals and plants. • Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. • Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

The table below demonstrates the statements from the National curriculum for each key stage and demonstrates the progression in learning for each Scientific topic.

Topic	Key Stage 1 National Curriculum Expectations	Lower Key Stage 2 National Curriculum Expectations	Upper Key Stage 2 National Curriculum Expectations
Animals (including humans)	Pupils should be taught to: • 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. • notice that animals, including humans, have offspring which grow into adults • find out about and describe the basic needs of animals, including humans, for survival (water, food and air) • describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene	Pupils should be taught 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 • Identify that humans and some 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.	Pupils should be taught to: • Describe the changes as humans develop to old age. • Learn about the changes experienced in puberty. • 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. • Learn how to keep their bodies healthy and how their bodies might be damaged – including how • some drugs and other substances can be harmful to the human body. • Explore the work of scientists and scientific research about the relationship between diet, exercise, drugs, lifestyle and health.

Plants	Pupils should be taught to: • 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.	Pupils should be taught to: • 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.	
Living things	Pupils should be taught to: • 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. • Describe how different habitats provide for the basic needs of different kinds of animals and 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. • Understand a simple food chain and identify and name different sources of food.	Pupils should be taught to: • 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.	Pupils should be taught to: • 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. • Find out about the work of naturalists and animal behaviourists, for example, David Attenborough and Jane Goodall. • Find out about different types of reproduction, including sexual and asexual reproduction in plants, and sexual reproduction in 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. • Know that broad groupings, such as microorganisms, plants and animals can be subdivided. • Classify animals into commonly found invertebrates (such as insects, spiders, snails, worms) and vertebrates (fish, amphibians, reptiles, birds and mammals). • Find out about significance of the work of scientists such as Carl Linnaeus, a pioneer of classification.

Evolution			Pupils should be taught 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. • 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. • Be introduced to the idea that characteristics are passed from parents to their offspring, i.e. different breeds of dogs, and what happens when, for example, Labradors are crossed with poodles. • Appreciate that variation in offspring over time can make animals more or less able to survive in particular environments, for example, by exploring how giraffes' necks got longer.
Seasonal changes	Pupils should be taught to: • Observe changes across the four seasons. • Observe and describe weather associated with the seasons and how day length varies.		

Forces		Pupils should be taught to: • 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.	Pupils should be taught to: • 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. • Explore the effects of air resistance by observing how different objects such as parachutes and sycamore seeds fall. • Explore the effects of friction on movement and find out how it slows or stops moving objects. • Find out how scientists, for example, Galileo Galilei and Isaac Newton helped to develop the theory of gravitation
Light		Pupils should be taught to: • 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 a solid object. • Find patterns in the way that the size of shadows change	Pupils should be taught to: • 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. • Work scientifically by deciding where to place rear view mirrors on cars; designing and making a periscope and using the idea that light appears to travel in straight lines to explain how it works. • Look at a range of phenomena including rainbows, colours on soap bubbles, objects looking bent in water and coloured filters (they do not need to explain why these phenomena occur).

Sound		Pupils should be taught to: • 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.	
Earth and Space			Pupils should be taught to: • 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. • Learn that the Sun is a star at the centre of our solar system and that it has eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune (Pluto was reclassified as a 'dwarf planet' in 2006). • Understand that a moon is a celestial body that orbits a planet (Earth has one moon; Jupiter has four large moons and numerous smaller ones).
Electricity		Pupils should be taught to: • Identify common appliances that run on electricity. • Construct a simple series circuit, identifying/naming its basic parts, including cell, wire, bulb, switch and buzzer. • Identify whether a lamp will light in a simple series circuit/ recognise that a switch opens and closes a circuit and associate this with whether a lamp lights in a simple series circuit. • Recognise some common conductors and insulators, and associate metals with being good conductors.	Pupils should be taught to: • Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. • 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. • Construct simple series circuits, to help them to answer questions about what happens when they try different components, for example, switches, bulbs, buzzers and motors. • Learn how to represent a simple circuit in a diagram using recognised symbols.

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Materials	Pupils should be taught to: • 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 based on 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 uses. • Find out how the shapes of solid objects made from some materials can be changed by	Pupils should be taught to: • Compare and group together different kinds of rocks (including those in the locality) on the basis of 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. • Explore a variety of everyday materials and develop simple descriptions of the 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.	Pupils should be taught 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 • 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. • Explore reversible changes, including, evaporating, filtering, sieving, melting and dissolving, recognising that melting and dissolving are different processes. • Explore changes that are difficult to reverse, for example, burning, rusting and other reactions, for example, vinegar with bicarbonate of soda.

Langley Fitzurse C of E Primary School Science Coverage and Progression of skills

The following statements demonstrate the progression of Scientific skills, methods, processes and knowledge from (EYFS) Year 1 to Year 6, so the children will develop the skills of 'working scientifically'.

Working Scientifically	
Reception	• Learn new vocabulary. • Ask questions to find out more and to check what has been said to them. • Articulate their ideas and thoughts in well-formed sentences. • Describe events in some detail. • Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. • Use new vocabulary in different contexts. • Explore the natural world around them. • Describe what they see, hear and feel while they are outside.
ELG	• Make comments about what they have heard and ask questions to clarify their understanding. • Explore the natural world around them, making observations and drawing pictures of animals and plants. • Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. • Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.
KS1	• Asking simple questions and recognising that they can be answered in different ways. • Observing closely, using simple equipment and measurement. • Performing simple tests. • Identifying and classifying. • Using their observations and ideas to suggest answers to questions. • Gathering, recording and communicating data and findings to help in answering questions. • Use scientific language and read and spell age-appropriate scientific vocabulary Begin to notice patterns and relationships.
LKS2	• Making decisions, asking relevant questions and using different types of scientific enquiries to answer them • Setting up simple practical enquiries, comparative and fair tests • Making systematic and careful observations using notes and simple tables • Taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers • Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions • Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • Reporting on findings from enquiries, using relevant scientific language, including oral and written explanations, displays or presentations of results and conclusions • Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • Identifying differences, patterns, similarities or changes related to simple scientific ideas and processes • Using straightforward scientific evidence to answer questions or to support their findings. • Begin to look for naturally occurring patterns and relationships • Recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations.

UKS2	• Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. • Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. • Using test results to make predictions to set up further comparative and fair tests. • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations. • Identifying scientific evidence that has been used to support or refute ideas or arguments. • Explore and talk about their ideas; asking their own questions about scientific phenomena; and analysing functions, relationships and interactions more systematically. • Recognise that scientific ideas change and develop overtime. • Draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings. • Pupils should read, spell and pronounce scientific vocabulary correctly.