EYFS Progression Map 2025/26	Subject: EYFS Understanding of the Word – The Natural World (Science)	Subject Lead: Mr T Brunton

***Characteristics of Effective Learning*:**

Playing and Exploring: children investigate and experience things, and 'have a go'

Active Learning: children concentrate and keep on trying if they encounter difficulties, and enjoy achievements

Creating and Thinking Creatively: children have and develop their own ideas, make links between ideas, and develop strategies for doing things

***Overarching Principles*:**

Unique Child: Every child is a unique child, who is constantly learning and can be resilient, capable, confident and self-assured

Positive Relationships: children learn to be strong and independent through positive relationships

Enabling Environments: children learn and develop well in enabling environments with teaching and support from adults, who respond to their individual interests and needs and help them to build their learning over time. Children benefit from a strong partnership between practitioners and parents and/or carers.

Learning & Development: Children develop and learn at different rates. We must be aware of children who need greater support than others.

Working Scientifically (also linked to Characteristics of Effective Teaching & Learning)

In the EYFS, the characteristics of effective learning from the Statutory Framework for the Early Years Foundation Stage are the foundations on which the working scientifically skills build in Key Stage 1. While children are playing and exploring, teachers should be modelling, encouraging and supporting them to do the following:

- show curiosity and ask questions
- make observations using their senses and simple equipment
- make direct comparisons
- use equipment to measure
- record their observations by drawing, taking photographs, using sorting rings or boxes and, in Reception, on simple tick sheets
- use their observations to help them to answer their questions
- talk about what they are doing and have found out
- identify, sort and group.

Year Group	Nursery (FS1)	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
General Themes		**All about me**	**Let's Celebrate**	**Winter Wonderland**	**Planting & Growing**	**Who can help me?**	**Once Upon a Time**
Understanding the World		Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children's personal experiences increases their knowledge and sense of the world around them –from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children's vocabulary will support later reading comprehension. EYFS Statutory Educational Programme					
The Natural World Weather, seasons and changes in the environment will run throughout our daily routines. Use of the blossom tree in the FSU garden to notice seasonal changes **NUSTEM Project to run throughout school**		Sustain interest in action and reaction toys. Actively collect and enjoy transporting materials. Use their senses in hands on exploration of natural materials. Engage in joint attention with adults for short periods of time in respectful observations of living things.	Use some very simple adjectives to describe the sensory properties of everyday materials. Explore collections of materials with similar and different properties. Improve techniques with a range of action and reaction toys.	Explore and talk about different forces they can feel. Explore and talk about the differences between materials and the changes they notice (melting/cooking/freezing) Explore how things work. (wind up toys, pulleys, sets of cogs with peg boards. Collect particular materials for a purpose. Make mechanisms such as pegboard cogs and other simple construction kit components such as wheels and axles.	Understand the life cycle of living things. Plant seeds & care for new plants. Respond appropriately to adult guidance to treat living things with care. Collect materials for a particular purpose and explain. Talk about what they see using a wide range of vocab.	Talk about, a stage at a time, the way a growing plant or animal is changing. Work alongside adults imitating their actions as they care for living things. Name some common animals and their babies	Demonstrate how to achieve a particular goal with pulley systems, ride on toys and digger toys. Use remote control toys to a particular end and explain how to do it. Actively explore the properties of everyday materials through spontaneous experimentation, narrating findings. Answer closed and anticipatory questions in simple adult led experiments about the properties of materials.

Year Group	Reception (FS2)	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
General Themes		**Me & My Emotions**	**Celebrations of Light**	**I wonder Why?**	**New Life**	**People Who Help Us**	**Terrific Tales**
Understanding the World		Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children's personal experiences increases their knowledge and sense of the world around them –from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children's vocabulary will support later reading comprehension. EYFS Statutory Educational Programme					
The Natural World Weather, seasons and changes in the environment will run throughout our daily routines. Use of the blossom tree in the FSU garden to notice seasonal changes **NUSTEM Project to run throughout school**		Notice seasonal changes around us (Focus on FSU garden tree) Talk about the weather. (drawing comparisons from holidays) Become familiar with new school surroundings (where is lunch hall, PE hall, new entrance) comparing differences with home (naming rooms) Look at fruit & vegetables with seeds (pumpkins—keep seeds for planting in Spring 2)	Name some special buildings in our community and explain their function through role play and small world re-enactment. Notice & describe seasonal changes around us (Focus on FSU garden tree) Know and demonstrate how to plant bulbs & predict how it will grow (Plant Christmas gift –hyacinth) Talk about animals preparing for hibernation, making bird feeders	Notice & describe seasonal changes around us (Focus on FSU garden tree) Describe and explain changes to water. (freeze/melt) Observe changes to the secret garden pond. (Frogs spawn/nesting birds) Observational drawings of their surroundings Mapping—naming buildings in local area begin to create maps Name street that they live in.	Notice & describe seasonal changes around us (Focus on FSU garden tree) Sequence the life of a baby bird from hatching to maturity. Plant pumpkin seeds and potatoes (Innocent Big Grow project) Revisit secret garden pond to observes changes to frogspawn/tadpoles)	Notice & describe seasonal changes around us (Focus on FSU garden tree). Know and demonstrate how to grow seeds and care for seedlings. Observational drawings of their surroundings Use google earth/drone to identify familiar places	Notice & describe seasonal changes around us (Focus on FSU garden tree) Describe and recall the transition from caterpillars into butterflies. Identify similarities and differences between the animals and plants in the beach environment and in the woodland environment

	Year Group	Progression Map 2025/26		Subject: Science	Subject Lead: Mr T Brunton
Breadth	**1**	**Plants**	**Seasonal changes**	**Animals, including humans**	**Materials**
Substantive Knowledge		To identify common plants in the nature area To know the names and function of the structures of flowering plants (stem, petal, stamen, anther, pollen, trunk, roots, fruit, leaves)	To know the four seasons and their order. To know the characteristics of the four seasons in the local environment. To observe and record the changes over the year.	To identify and name a variety of common animals found in the conservation area. To identify and classify fish, amphibians, reptiles, birds and mammals. To know what a carnivore/herbivore is and identify examples. To describe the bodies of different animal classes (incl. pets). To label basic parts of the human body and their function in relation to the senses.	To distinguish between an object and the material from which it is made. To compare and group a variety of everyday materials based their simple physical properties. To describe some physical properties of a variety of everyday materials. To identify and compare the uses of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.

	Asking questions and recognising that they can be answered in different ways	Making observations and taking measurements	Engaging in practical enquiry to answer questions	Recording and presenting evidence	Answering questions and concluding
Disciplinary Knowledge	**Asking simple questions and recognising that they can be answered in different ways** • While exploring the world, the children develop their ability to ask questions (such as what something is, how things are similar and different, the ways things work, which alternative is better, how things change and how they happen). Where appropriate, they answer these questions. • The children answer questions developed with the teacher often through a scenario. • The children are involved in planning how to use resources provided to answer the questions using different types of enquiry, helping them to recognise that there are different ways in which questions can be answered.	**Observing closely, using simple equipment** • Children explore the world around them. They make careful observations to support identification, comparison and noticing change. They use appropriate senses, aided by equipment such as magnifying glasses or digital microscopes, to make their observations. • They begin to take measurements, initially by comparisons, then using non-standard units.	**Performing simple tests** • The children use practical resources provided to gather evidence to answer questions generated by themselves or the teacher. They carry out: tests to classify; comparative tests; pattern seeking enquiries; and make observations over time. **Identifying and classifying** • Children use their observations and testing to compare objects, materials and living things. They sort and group these things, identifying their own criteria for sorting. • They use simple secondary sources (such as identification sheets) to name living things. They describe the characteristics they used to identify a living thing.	**Gathering and recording data to help in answering questions** • The children record their observations e.g. using photographs, videos, drawings, labelled diagrams or in writing. • They record their measurements e.g. using prepared tables, pictograms, tally charts and block graphs. • They classify using simple prepared tables and sorting rings.	**Using their observations and ideas to suggest answers to questions** • Children use their experiences of the world around them to suggest appropriate answers to questions. They are supported to relate these to their evidence e.g. observations they have made, measurements they have taken or information they have gained from secondary sources. **Using their observations and ideas to suggest answers to questions** • The children recognise 'biggest and smallest', 'best and worst' etc. from their data.

	Year Group	Progression Map 2025/26	Subject: Science		Subject Lead: Mr T Brunton
Breadth	**2**	**Materials**	**Plants**	**Animals, including humans**	**Living things and their habitats**
Substantive Knowledge		To investigate the suitability of materials to perform a task, eg: paper for an umbrella. To explore how shapes of solid objects can be changed by quashing, twisting and bending.	To know about how and to observe plants growing from seeds and bulbs into mature plants. To explore the need for plants to have water, sunlight and suitable temperature to grow. To begin to know about seed dispersal To know about photosynthesis.	To know that animals need water, nutrition, shelter and oxygen to survive. To know about how humans (and other animals) have offspring that grow to adults ad to describe the journey. To know the importance of exercise, healthy diets and hygiene for humans.	To explore, classify and compare the differences between things that are living, dead, and things that have never been alive. To know why living things live in their particular habitats they are suited to and require. To understand that animals and plants in a habitat depend on each other in different ways. To identify and name some plants and animals in their habitats, including micro-habitats. To understand and describe food relationships and 4-step food chains.

	Asking questions and recognising that they can be answered in different ways	Making observations and taking measurements	Engaging in practical enquiry to answer questions	Recording and presenting evidence	Answering questions and concluding
Disciplinary Knowledge	**Asking simple questions and recognising that they can be answered in different ways** • While exploring the world, the children develop their ability to ask questions (such as what something is, how things are similar and different, the ways things work, which alternative is better, how things change and how they happen). Where appropriate, they answer these questions. • The children answer questions developed with the teacher often through a scenario. • The children are involved in planning how to use resources provided to answer the questions using different types of enquiry, helping them to recognise that there are different ways in which questions can be answered.	**Observing closely, using simple equipment** • Children explore the world around them. They make careful observations to support identification, comparison and noticing change. They use appropriate senses, aided by equipment such as magnifying glasses or digital microscopes, to make their observations. • They begin to take measurements, initially by comparisons, then using non-standard units.	**Performing simple tests** • The children use practical resources provided to gather evidence to answer questions generated by themselves or the teacher. They carry out: tests to classify; comparative tests; pattern seeking enquiries; and make observations over time. **Identifying and classifying** • Children use their observations and testing to compare objects, materials and living things. They sort and group these things, identifying their own criteria for sorting. • They use simple secondary sources (such as identification sheets) to name living things. They describe the characteristics they used to identify a living thing.	**Gathering and recording data to help in answering questions** • The children record their observations e.g. using photographs, videos, drawings, labelled diagrams or in writing. • They record their measurements e.g. using prepared tables, pictograms, tally charts and block graphs. • They classify using simple prepared tables and sorting rings.	**Using their observations and ideas to suggest answers to questions** • Children use their experiences of the world around them to suggest appropriate answers to questions. They are supported to relate these to their evidence e.g. observations they have made, measurements they have taken or information they have gained from secondary sources. **Using their observations and ideas to suggest answers to questions** • The children recognise 'biggest and smallest', 'best and worst' etc. from their data.

	Year Group	Progression Map 2025/26		Subject: Science		Subject Lead: Mr T Brunton
Breadth	**3**	**Rocks**	**Plants**	**Forces and magnets**	**Light**	**Animals, including Humans**
Substantive Knowledge		To classify rocks based on simple properties (eg: appearance). To explore how the sandstone in the school building has weathered and suggest reasons for it. To know how fossils are formed and describe what they are. To know that soil is made from rock and organic matter.	To know and describe the functions of roots, stems/trunks, leaves and flowers. To test the requirements of plants to have soil, light, water, and room to grow. To know about and test how water is transported in plants. To know about the lifecycle of plant in our conservation area: observe the ash trees. To understand the role of flowers, pollen, seeds and the processes they are involved in (pollination, germination, seed dispersal).	To compare how different surfaces affect the movement of objects across them. To know that magnets don't need to touch to demonstrate their force. To observe the properties and behaviour of magnet: repelling, attracting, magnetic/non-magnetic surfaces. To know about magnetic polarity.	To know that light is visible energy. To know about light sources (fire, electricity, the sun). To know that light is reflected of surfaces. To understand how shadows are formed and how they change through the day. To know about the dangers of light sources: the sun, lasers etc.	To know that animals **cannot** make their own food: they must find it themselves. To begin to understand the structure and role of skeletons and muscles.

	Asking questions and recognising that they can be answered in different ways	Making observations and taking measurements	Engaging in practical enquiry to answer questions	Recording and presenting evidence	Answering questions and concluding	Evaluating and raising further questions and predictions	Communicating their findings
Disciplinary Knowledge	**Asking relevant questions and using different types of scientific enquiries to answer them** • The children consider their prior knowledge when asking questions. They independently use a range of question stems. Where appropriate, they answer these questions. • The children answer questions posed by the teacher. • Given a range of resources, the children decide for themselves how to gather evidence to answer the question. They recognise when secondary sources can be used to answer questions that cannot be answered through practical work. They identify the type of enquiry that they have chosen to answer their question.	**Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers** • The children make systematic and careful observations. • They use a range of equipment for measuring length, time, temperature and capacity. They use standard units for their measurements.	**Setting up simple practical enquiries, comparative and fair tests** • The children select from a range of practical resources to gather evidence to answer questions generated by themselves or the teacher. • They follow their plan to carry out: observations and tests to classify; comparative and simple fair tests; observations over time; and pattern seeking. Explanatory note A comparative test is performed by changing a variable that is qualitative e.g. the type of material, shape of the parachute. This leads to a ranked outcome. A fair test is performed by changing a variable that is quantitative e.g. the thickness of the material or the area of the canopy. This leads to establishing a causative relationship.	**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** • The children sometimes decide how to record and present evidence. They record their observation e.g. using photographs, videos, pictures, labelled diagrams or writing. They record their measurements e.g. using tables, tally charts and bar charts (given templates, if required, to which they can add headings). They record classifications e.g. using tables, Venn diagrams, Carroll diagrams. • Children are supported to present the same data in different ways in order to help with answering the question.	**Using straightforward scientific evidence to answer questions or to support their findings** • Children answer their own and others' questions based on observations they have made, measurements they have taken or information they have gained from secondary sources. The answers are consistent with the evidence. **Identifying differences, similarities or changes related to simple scientific ideas and processes** • Children interpret their data to generate simple comparative statements based on their evidence. They begin to identify naturally occurring patterns and causal relationships. **Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions** • They draw conclusions based on their evidence and current subject knowledge.	**Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions** • They identify ways in which they adapted their method as they progressed or how they would do it differently if they repeated the enquiry **Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions** • Children use their evidence to suggest values for different items tested using the same method e.g. the distance travelled by a car on an additional surface. • Following a scientific experience, the children ask further questions which can be answered by extending the same enquiry.	**Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions** • They communicate their findings to an audience both orally and in writing, using appropriate scientific vocabulary.

	Year Group	Progression Map 2025/26		Subject: Science		Subject Lead: Mr T Brunton
Breadth	**4**	**Sound**	**Animals including humans**	**States of matter**	**Electricity**	**Living things and their habitats**
Substantive Knowledge		To identify how sounds are made and relate to vibration of atoms. To know that vibrations from sounds travel through a medium to the ear and that some materials transmit sounds better than others. To find patterns between pitch of sound and the features of the object making it. To find patterns between to volume of a sound and the vibration's strength To recognise that sounds grow fainter with distance from the source. To observe that sound travels slower than light.	To describe the function and structure of the human digestive system. To identify different types of teeth in humans and their function. To look at the dentition of other animals to deduce their diets (carnivore / herbivore). Identify producers, predators and prey in a variety of food chains	To know about and identify solids, liquids and gasses. To understand the basic mechanics and physics of the three main states of matter. To observe that some materials can change their state after heating / cooling and know the terms: melt, freeze, evaporate, condense. To relate condensation and evaporation to the Water Cycle and link the rates to temperature (geography links).	To identify common appliances that run on electricity. To construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. To identify whether or not a circuit with missing parts will work and explain why. To recognise and demonstrate that a switch opens and closes a circuit. To recognise some common conductors and insulators, and associate metals with being good conductors. To know about and to understand issues of safety around electricity: in the home/school, railways, sub-stations etc.	To classify living things from the conservation area in different ways. To make classification keys for living things in the conservation area, as well as examples given from the wider world. To understand describe changes to environments that can harm or pose dangers to living things (Geography links with water conservation).

	Asking questions and recognising that they can be answered in different ways	Making observations and taking measurements	Engaging in practical enquiry to answer questions	Recording and presenting evidence	Answering questions and concluding	Evaluating and raising further questions and predictions	Communicating their findings
Disciplinary Knowledge	**Asking relevant questions and using different types of scientific enquiries to answer them** • The children consider their prior knowledge when asking questions. They independently use a range of question stems. Where appropriate, they answer these questions. • The children answer questions posed by the teacher. • Given a range of resources, the children decide for themselves how to gather evidence to answer the question. They recognise when secondary sources can be used to answer questions that cannot be answered through practical work. They identify the type of enquiry that they have chosen to answer their question.	**Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers** • The children make systematic and careful observations. They use a range of equipment for measuring length, time, temperature and capacity. They use standard units for their measurements.	**Setting up simple practical enquiries, comparative and fair tests** • The children select from a range of practical resources to gather evidence to answer questions generated by themselves or the teacher. • They follow their plan to carry out: observations and tests to classify; comparative and simple fair tests; observations over time; and pattern seeking. Explanatory note A comparative test is performed by changing a variable that is qualitative e.g. the type of material, shape of the parachute. This leads to a ranked outcome. A fair test is performed by changing a variable that is quantitative e.g. the thickness of the material or the area of the canopy. This leads to establishing a causative relationship.	**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** • The children sometimes decide how to record and present evidence. They record their observation e.g. using photographs, videos, pictures, labelled diagrams or writing. They record their measurements e.g. using tables, tally charts and bar charts (given templates, if required, to which they can add headings). They record classifications e.g. using tables, Venn diagrams, Carroll diagrams. • Children are supported to present the same data in different ways in order to help with answering the question.	**Using straightforward scientific evidence to answer questions or to support their findings** • Children answer their own and others' questions based on observations they have made, measurements they have taken or information they have gained from secondary sources. The answers are consistent with the evidence. **Identifying differences, similarities or changes related to simple scientific ideas and processes** • Children interpret their data to generate simple comparative statements based on their evidence. They begin to identify naturally occurring patterns and causal relationships. **Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions** They draw conclusions based on their evidence and current subject knowledge.	**Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions** • They identify ways in which they adapted their method as they progressed or how they would do it differently if they repeated the enquiry **Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions** • Children use their evidence to suggest values for different items tested using the same method e.g. the distance travelled by a car on an additional surface. Following a scientific experience, the children ask further questions which can be answered by extending the same enquiry.	**Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions** They communicate their findings to an audience both orally and in writing, using appropriate scientific vocabulary.

	Year Group	Progression Map 2025/26		Subject: Science		Subject Lead: Mr T Brunton
Breadth	**5**	**Living things and their habitats**	**Earth and space**	**Forces**	**Animals, including humans**	**Materials**
Substantive Knowledge		To describe the life cycles of a mammal, amphibian, insect and a bird. To show the life cycle of creatures. To describe reproduction in the trees found in the school grounds, humans, and another animal.	To know the structure and basic mechanics of the Solar System. To know that the Sun and planets are roughly spherical. To know the planets in order To know the relative sizes of Earth, Moon and Sun and the relative distances between them and other planets. To describe the movement of the Earth, Sun and Moon relative to each other. To describe day / night and spin and axial tilt latitude and relative position with the Sun to explain climate zones on Earth (GEOGRAPHY)	To describe gravity as an invisible force that attracts mass towards the centre of the Earth. To identify the effects of friction, air resistance and water resistance on travelling objects. To know the relationship between surface area and the size of the friction, air/water resistance force. To know and demonstrate that lever and pulley systems can amplify or reduce a force.	To describe the processes of ageing in humans from infant to adult to old age.	To classify and compare a range of everyday materials based on the properties of: conductivity (thermal and electrical), transparency, solubility and hardness. To describe the process of dissolving and how to recover a dissolved substance. To understand the terms solution, soluble, dissolve, residue, evaporation, emulsion, mixture. To use knowledge of the states of matter to explain how mixture of different materials may be separated. To demonstrate that dissolving and mixing are reversible changes To know that some changes in materials form new materials and that is usually irreversible: burning, acid+bicarb.

	Asking questions and recognising that they can be answered in different ways	Making observations and taking measurements	Engaging in practical enquiry to answer questions	Recording and presenting evidence	Answering questions and concluding	Evaluating and raising further questions and predictions	Communicating their findings
Disciplinary Knowledge	**Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary** • Children independently ask scientific questions. This may be stimulated by a scientific experience or involve asking further questions based on their developed understanding following an enquiry. • Given a wide range of resources the children decide for themselves how to gather evidence to answer a scientific question. They choose a type of enquiry to carry out and justify their choice. They recognise how secondary sources can be used to answer questions that cannot be answered through practical work.	**Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate** • The children select measuring equipment to give the most precise results e.g. ruler, tape measure or trundle wheel, force meter with a suitable scale. • During an enquiry, they make decisions e.g. whether they need • to: take repeat readings (fair testing); increase the sample size (pattern seeking); adjust the observation period and frequency (observing over time); or check further secondary sources (researching); in order to get accurate data (closer to the true value).	**Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary** • The children select from a range of practical resources to gather evidence to answer their questions. They carry out fair tests, recognising and controlling variables. They decide what observations or measurements to make over time and for how long. They look for patterns and relationships using a suitable sample.	**Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs** • The children decide how to record and present evidence. They record observations e.g. using annotated photographs, videos, labelled diagrams, observational drawings, labelled scientific diagrams or writing. They record measurements e.g. using tables, tally charts, bar charts, line graphs and scatter graphs. They record classifications e.g. using tables, Venn diagrams, Carroll diagrams and classification keys. • Children present the same data in different ways in order to help with answering the question.	**Identifying scientific evidence that has been used to support or refute ideas or arguments** • Children answer their own and others' questions based on observations they have made, measurements they have taken or information they have gained from secondary sources. When doing this, they discuss whether other evidence e.g. from other groups, secondary sources and their scientific understanding, supports or refutes their answer. • They talk about how their scientific ideas change due to new evidence that they have gathered. • They talk about how new discoveries change scientific understanding. **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** • In their conclusions, children: identify causal relationships and patterns in the natural world from their evidence; identify results that do not fit the overall pattern; and explain their findings using their subject knowledge.	**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** • They evaluate, for example, the choice of method used, the control of variables, the precision and accuracy of measurements and the credibility of secondary sources used. • They identify any limitations that reduce the trust they have in their data. **Using test results to make predictions to set up further comparative and fair tests** • Children use the scientific knowledge gained from enquiry work to make predictions they can investigate using 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** • They communicate their findings to an audience using relevant scientific language and illustrations.

	Year Group	Progression Map 2025/26		Subject: Science		Subject Lead: Mr T Brunton	
Breadth	**6**	**Evolution and inheritance**	**Electricity**	**Light**	**Living things and their habitats**	**Animals including humans**	
Substantive Knowledge		To recognise that living things have changed over long periods of time and that fossils provide evidence about living things of the past. To recognise that living things produce offspring of the same kind, but re individually different from their parents. To recognise, identify and describe how animals and plants in the local environment and globally are suited to their environment. To understand that adaptation leads to evolution over millions of years.	To know that an increase in voltage or number of cells will increase a bulb's brightness. To compare and give reasons for variation in how component in a circuit function. To use recognised symbols when drawing circuit diagrams.	To know that light travels in straight lines. To understand the mechanics of how we see, including the anatomy of the human eye. To know that visible light reflects of surfaces, allowing us to see them To use their understanding of how light travels to explain why shadow have the same shape as the opaque object that causes them.	Understand about taxonomic classification of plants and animals in terms of observable characteristics and give reasons living things are grouped in that way.	To describe the structures and function of the human circulatory system, including: heart, arteries, veins, blood vessels and blood. To recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. To describe the way that nutrients and water are transported within animals (including humans).	

	Asking questions and recognising that they can be answered in different ways	Making observations and taking measurements	Engaging in practical enquiry to answer questions	Recording and presenting evidence	Answering questions and concluding	Evaluating and raising further questions and predictions	Communicating their findings
Disciplinary Knowledge	**Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary** • Children independently ask scientific questions. This may be stimulated by a scientific experience or involve asking further questions based on their developed understanding following an enquiry. • Given a wide range of resources the children decide for themselves how to gather evidence to answer a scientific question. They choose a type of enquiry to carry out and justify their choice. They recognise how secondary sources can be used to answer questions that cannot be answered through practical work.	**Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate** • The children select measuring equipment to give the most precise results e.g. ruler, tape measure or trundle wheel, force meter with a suitable scale. • During an enquiry, they make decisions e.g. whether they need • to: take repeat readings (fair testing); increase the sample size (pattern seeking); adjust the observation period and frequency (observing over time); or check further secondary sources (researching); in order to get accurate data (closer to the true value).	**Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary** • The children select from a range of practical resources to gather evidence to answer their questions. They carry out fair tests, recognising and controlling variables. They decide what observations or measurements to make over time and for how long. They look for patterns and relationships using a suitable sample.	**Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs** • The children decide how to record and present evidence. They record observations e.g. using annotated photographs, videos, labelled diagrams, observational drawings, labelled scientific diagrams or writing. They record measurements e.g. using tables, tally charts, bar charts, line graphs and scatter graphs. They record classifications e.g. using tables, Venn diagrams, Carroll diagrams and classification keys. • Children present the same data in different ways in order to help with answering the question.	**Identifying scientific evidence that has been used to support or refute ideas or arguments** • Children answer their own and others' questions based on observations they have made, measurements they have taken or information they have gained from secondary sources. When doing this, they discuss whether other evidence e.g. from other groups, secondary sources and their scientific understanding, supports or refutes their answer. • They talk about how their scientific ideas change due to new evidence that they have gathered. • They talk about how new discoveries change scientific understanding. **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** • In their conclusions, children: identify causal relationships and patterns in the natural world from their evidence; identify results that do not fit the overall pattern; and explain their findings using their subject knowledge.	**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** • They evaluate, for example, the choice of method used, the control of variables, the precision and accuracy of measurements and the credibility of secondary sources used. • They identify any limitations that reduce the trust they have in their data. **Using test results to make predictions to set up further comparative and fair tests** • Children use the scientific knowledge gained from enquiry work to make predictions they can investigate using 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** They communicate their findings to an audience using relevant scientific language and illustrations.