

INSPIRE

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INTEGRITY

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Science Policy V3

Sheep Dip Lane Academy

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Version Number	Version 3
Date Approved/Reviewed	July 2025
Date of Next Review	July 2028
Approved By	LGB
Policy Category	Academy Policy
(Please indicate in bold)	



Exceed Learning Partnership
• EVERY CHILD • EVERY CHANCE • EVERY DAY •

Version Control

Version	Revision Date	Revised by		Section Revised
V1	Sept 20	LB	All sections – revised document – including lockdown procedures for online learning and recovery curriculum	
V2	Jan 22	LB/AP	All sections – lockdown and recovery curriculum removed Science progression schemes of learning added	
V3	July 2025	AP	New Cover Revised Document – amendments made	

Rationale

At Sheep Dip Lane Academy, we believe that Science is a continuous process which helps our pupils to discover and to develop an understanding of their own environment and which helps to prepare them for adult life. We believe that it is important for our pupils to have a range and breadth of experience and that in order for them to develop a progressively systematic and quantified approach, that specific objectives are taught.

Curriculum Intent

At Sheep Dip Lane Academy, we **ASPIRE** to ensure all children are equipped with the scientific knowledge required to understand the **uses and implications** of science, today and for the future. Children develop an enthusiasm for and enjoyment of science through a range of engaging and hands-on activities that encourage them to recognise the power of rational explanation and develop **a sense of excitement and curiosity about natural phenomena**.

We are ambitious about developing children's **scientific knowledge and conceptual understanding** of important scientific ideas, along with key processes and skills, through the specific disciplines of biology, chemistry and physics. Children develop an understanding of **the nature, processes and methods of science** through different types of enquires that help them to answer scientific questions about the world around them. We endeavour to make lessons thought-provoking and inspiring, leading children to wonder, ask questions, research and then discuss their learning at home to become successful, confident learners, enjoying the process of exploring values and ideas through science.

At the heart of our curriculum are our Learning Characteristics, when teaching science we ensure that the children can develop the skills of investigation, evaluation and team work alongside developing a resilient mind-set.

Inclusion is at the heart of our intention and all children are given the support and opportunities they need to thrive in this subject. Our main intention in Science is to provide a sound foundation for the development of the following scientific skills:

- to develop scientific understanding, knowledge and skills progressively through practical investigations/explorations and research throughout all year groups.
- to develop the skills of interpreting and evaluating data and working scientifically
- to develop an awareness of safety
- to develop the concepts of the following topics; everyday materials, plants, seasonal changes, forces and magnets, light, animals; including humans, rocks, sound, electricity, living things, evolution and inheritance, earth and space

Our Science curriculum precisely follows the units outlined in the National Curriculum. It is our intention that through

studying science, pupils become more expert as they progress through the curriculum, accumulating, connecting and making sense of the rich substantive and disciplinary knowledge.

1. **Substantive knowledge** - this is the subject knowledge and explicit vocabulary used to learn about the content. Common misconceptions are planned for and addressed to ensure pupils learn accurate content. In our Science curriculum, an extensive and connected knowledge base is constructed so that pupils can use these foundations and integrate it with what they already know. Misconceptions are challenged carefully and in the context of the substantive and disciplinary knowledge. In Science, we do not introduce misconceptions too early, as pupils need to construct a mental model in which to position that new knowledge.

Substantive concepts include concrete examples, such as 'plant' or more abstract ideas, such as 'biodiversity'. Concepts are taught through explicit vocabulary instruction as well as through the direct content and context of the study.

2. **Disciplinary knowledge** – this is knowing how to collect, use, interpret, understand and evaluate the evidence from scientific processes. This is taught. It is not assumed that pupils will acquire these skills by luck or hope. Pupils construct understanding by applying substantive knowledge to questioning and planning, observing, performing a range of tests, accurately measuring, comparing through identifying and classifying, using observations and gathering data to help answer questions, explaining and reporting, predicting, concluding, improving, and seeking patterns. We call it '**Working Scientifically**.' We map Working Scientifically coverage to check the balance of provision in KS1, Lower and Upper KS2.

Scientific analysis is developed through IPROF criteria. We call it '**Thinking Scientifically**.' These are mapped throughout the curriculum.

- identifying and classifying
- pattern seeking
- research
- observing over time
- fair and comparative testing.

In Science, substantive knowledge is always present and acts as a precursor for pupils' understanding. This will enable them to successfully apply disciplinary knowledge. In KS2 Science, we have defined these terms:

- **variable** - the things that can change in a science experiment
- **independent variable** - the *variable* that is changed by the scientist
- **dependent variables** - are the things that the scientist watches closely for to see how they *respond* to the change made to the *independent* variable
- **controlled variables** - the things that a scientist wants to remain the same and not change so they can see how the independent variable reacts

These give structure to working and thinking scientifically tasks in relation to the substantive knowledge taught in that specific study.

“what scientists observe, or choose to control in an experiment, depends on what they know. For example, classifying flowering plants scientifically requires knowledge of floral parts to place specimens in appropriate groups. However, classifying insects requires knowledge of body parts.” Ofsted Research Series: Science, 2021.

Science is planned so that the retention of knowledge is much more than just ‘in the moment knowledge’. The cumulative nature of the curriculum is made memorable by the implementation of Bjork’s desirable difficulties, including retrieval and spaced retrieval practice, word building and deliberate practice tasks. This powerful interrelationship between structure and research-led practice is designed to increase substantive knowledge and accelerate learning within sequences and over time. That means the foundational knowledge of the curriculum is positioned to ease the load on the working memory: new content is connected to prior learning. The effect of this cumulative model supports opportunities for children to associate and connect significant scientific concepts, over time, and with increasing expertise and knowledge.

Implementation

In Science, we have a rigorous and well organised Science long term plan in line with the National Curriculum, where teaching and learning will show progression across all key stages within the strands of Science. This also includes practical investigative opportunities within Science lessons.

This long-term plan includes a 2-year cycle (cycle A and cycle B) which has been carefully planned by the subject specialists. It identifies key concepts, what we want children to know, key resources and lesson ideas and planned assessment questions that children should be able to answer by the end of a scheme of learning. Within each Science lesson, children are introduced to and have access to key language and meanings in order to understand and readily apply this to their scientific understanding.

Through each Science topic, children will use and become confident with a range of Scientific resources to develop their knowledge and understanding of how to work scientifically. Using the National Curriculum teachers should plan the ‘Working Scientifically’ objectives alongside those within the topic planning.

Children will have lots of opportunities to build on prior knowledge throughout a Science topic and across year groups/phases and this is highlighted within each concept of the long-term planning. This will enable them to link ideas together, to question each other and become enquiry-based learners.

At the beginning of each Science topic an enquiry session should take place to assess what children already know. Attainment will then be assessed formatively throughout the topic, with a summative judgement being made at the end of the scheme of learning.

Impact

As a result:

- Children will become resilient, independent and curious scientists who ask questions and find things out for themselves.
- Science will be a high-profile subject throughout the school.
- Children will be enthusiastic and motivated scientific learners.
- The outdoor classroom will be utilised regularly throughout science lessons.

- Parents and the wider community will support science learning through trips and visits on a regular basis.
- Children will have an awareness of the full range of scientific careers.
- Children will leave for secondary school equipped with the scientific knowledge and skills needed to succeed in their further education.

POLICY IN PRACTICE

Statutory Requirements

The statutory requirements in the new curriculum aims to ensure that all pupils:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future

Each attainment target is divided into themes. The themes are to assist in the planning of topics and in the understanding of progression through the Key Stages. The programmes of study are divided under the themes and it is important that coverage of them is planned for. Assessments need to be undertaken with reference to the age-related expectations for each year group. It is important to cover all parts of the programmes of study, as planning to the level of descriptions alone may mean that significant areas of the programmes of study will be missed. This would leave gaps in the pupils' scientific understanding and knowledge, which may be vital for later work.

Statutory Programme of Study

The programmes of study for science are set out year-by-year for key stages 1 and 2. Schools are, however, only required to teach the relevant programme of study by the end of the key stage. Within each key stage, schools therefore have the flexibility to introduce content earlier or later than set out in the programme of study. In addition, schools can introduce key stage content during an earlier key stage if appropriate. All schools are also required to set out their academy curriculum for science on a year-by-year basis and make this information available online.

Within our academy teachers will ensure that the following subjects are taught within the following key stages over a long-term plan – this is the whole academy overview for Science across a 2-year rolling programme –

	Autumn Term Identity & Social Justice	Spring Term Power, Leadership & Invasion	Summer Term Sustainability & Impact on Our World
FS1	Harvest / Celebrations Seasonal Changes <ul style="list-style-type: none"> Children show curiosity towards and ask questions/make comments about their environments – weather changes etc. Children will identify and sort natural objects Children use their senses to explore the season in a range of hands-on situations, applying basic vocabulary (key vocabulary in knowledge organisers)	See, Hear, Feel Floating & Sinking <ul style="list-style-type: none"> Children will identify, through hands-on exploration, objects that float and sink Children use their senses to explore floating and sinking in a range of hands-on situations, applying basic vocabulary (key vocabulary in knowledge organisers) 	Animals, Plants & Habitats <ul style="list-style-type: none"> Children will be able to name an animal and habitat e.g. cow – farm Children will be able to name and care for a plant Children will explore a basic life-cycle e.g. caterpillar – chrysalis – butterfly
FS2	Seasons Animals & Habitats <ul style="list-style-type: none"> Children will explore and understand some seasonal changes that happen in Autumn Children compare some similarities and differences in the seasons Children will be able to identify and name certain animals and their habitats Children compare two different types of animal 	Living Things & Plants <ul style="list-style-type: none"> Children will understand something that a living thing does e.g. breathe Children will be able to name some living things e.g. people, animals, plants Children will explore and talk about types of different life cycles e.g. frogspawn – tadpole – frog, baby – child – adult Children will be able to name different plants and observe them growing 	Materials Natural World <ul style="list-style-type: none"> Children will explore the names of different materials e.g. wood, plastic metal Children compare similarities and differences in the materials Children will learn vocabulary for some properties of materials e.g. hard, soft, shiny, rough ELG: Children 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; - Children understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

KS1 cycle A	Seasonal Changes (Y1)	Living Things & Life Cycles (Y2)	Working Scientifically (Y1/2)
	♣ observe changes across the four seasons		

	♣ observe and describe weather associated with the seasons and how day length varies.	♣ 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 and 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 microhabitats ♣ 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.	♣ asking simple questions and recognising that they can be answered in different ways ♣ observing closely, using simple equipment ♣ performing simple tests ♣ identifying and classifying ♣ using their observations and ideas to suggest answers to questions ♣ gathering and recording data to help in answering questions.
KS1 cycle B	Everyday Materials (Y1) Uses of materials (Y2) <ul style="list-style-type: none"> ♣ 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 on the basis of 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 particular uses ♣ find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. 	Animals including Humans (Y1/2) <ul style="list-style-type: none"> ♣ 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 Science ♣ 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. 	Plants (Y1/2) <ul style="list-style-type: none"> ♣ 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.

Lower KS2 cycle A	Rocks & Fossils (Y3)	Plants & Animals (Y3/4)	States of Matter Solids, Liquids & Gases (Y4)
	♣ compare and group together different kinds of rocks on the basis of their appearance and simple physical properties	♣ identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers	♣ compare and group materials together, according to whether they are solids, liquids or gases

	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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.
Lower KS2 cycle B	<p>Living Things & Habitats Animals including Humans</p> <ul style="list-style-type: none"> 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 other animals have skeletons and muscles for support, protection and movement. recognise that living things can be grouped in a variety of ways explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment recognise that environments can change and that this can sometimes pose dangers to living things. 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. 	<p>Light, Sound & Electricity (Y3/4)</p> <ul style="list-style-type: none"> 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 an opaque object find patterns in the way that the size of shadows <u>change</u>. 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. identify common appliances that run on electricity construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit recognise some common conductors and insulators, and associate metals with being good conductors. 	<p>Forces & Magnets (Y3)</p> <ul style="list-style-type: none"> 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.

Upper KS2 cycle A	<p>Forces Light</p> <ul style="list-style-type: none"> 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. 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. 	<p>Animals including Humans (Y5/6)</p> <ul style="list-style-type: none"> describe the changes as humans develop to old age. 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. 	<p>Earth and Space</p> <ul style="list-style-type: none"> 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.
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Upper KS2 cycle B	<p>Living Things & their Habitats Evolution & Inheritance</p> <ul style="list-style-type: none"> 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. 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 give reasons for classifying plants and animals based on specific characteristics. 	<p>Electricity</p> <ul style="list-style-type: none"> 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. 	<p>Properties and changes of Materials (including changes of solids, liquids and gases)</p> <ul style="list-style-type: none"> 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
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	<ul style="list-style-type: none"> 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. 		<ul style="list-style-type: none"> 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.
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Key	Biology	Chemistry	Physics
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Organisation of Teaching and Learning

For all subjects Working Scientifically will be included throughout the curriculum. These objectives are clearly listed in the programme of study and are evident in teachers planning and lesson objectives.

Science subject leaders have created schemes of learning progression of skills document for Science subjects and this includes key concepts that the children must learn throughout the topic based on National Curriculum expectations. The schemes of learning also contain ideas for lessons and resources to support short/medium term planning, assessment activities, experiences to investigate/work scientifically. It also includes prior knowledge so a clear progression of knowledge and skills can be evidenced from one-year group on to the next.

Aims of Scientific Enquiry

In order for our pupils to achieve the highest standards in science we must enable them to develop specific skills in scientific enquiry, increasing complexity as they progress through academy.

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Working Scientifically

'Working scientifically' specifies the understanding of the nature, processes and methods of science for each year group. It should not be taught as a separate strand. The notes and guidance give examples of how 'working scientifically' might be embedded within the content of biology, chemistry and physics, focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions. These types of scientific enquiry should include: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources. Pupils should seek answers to questions through collecting, analysing and presenting data. 'Working scientifically' will be developed further at key stages 3 and 4, once pupils have built up sufficient understanding of science to engage meaningfully in more sophisticated discussion of experimental design and control.

Observing and Measuring

In Year 1 we would expect most pupils to observe familiar materials and events at first hand, using their senses and to begin to make comparisons between living and non-living things and natural and made objects. By Year 6 we would expect most pupils to classify into broad groups according to common observable characteristics. Also, to quantify their observations by selecting and using appropriate instruments, such as a Newton meter to measure the strength of a force.

Investigating and Manipulating Variables

From being able to explore the effects of magnets in Year 1 we would expect most pupils to be able to identify the variables to be measured, changed or controlled in an investigation in Year 6.

Questioning, Predicting and Hypothesising

From asking questions such as "how?", "why?" and "what will happen if?" In Year 1 we hope that most of our pupils in Year 6 will be able to make predictions based on previous knowledge and understanding and begin to formulate hypotheses.

These include: -

- The use of extended vocabulary
- Demonstrations and sharing of skills, knowledge and techniques

Communicating and Recording

We would expect that pupils would progress from being able to list and describe their observations in Year 1 to being able to systematically list and record data using tables, charts and graphs, where appropriate, by Year 6.

Interpreting and Evaluating

In Year 1 it is reasonable to expect most pupils to begin to associate one fact with another and to compare what they have observed with what they expected. By Year 6 it is reasonable to expect that most pupils will be able to interpret the results of their investigations by linking patterns in their results to the original question, idea or prediction and that they will begin to draw conclusions that are consistent with the evidence.

Attitudes

We believe that pupils' attitudes are very important for effective learning to take place.

We aim to promote the following attitudes in our pupils: -

- an enquiring mind
- co-operation with others
- valuing the opinion of others
- open-mindedness
- perseverance
- originality

Citizenship/Inclusion

All children will have the same opportunity to follow the science curriculum with each child learning at a pace that is appropriate to them. Through work carried out in science children will have the opportunity to:

- extend and develop their social skills
- work as part of a team
- experience moral and cultural issues
- discover the magic of the world around them

Children working at Greater Depth

The curriculum and organisation of the science curriculum allows each child to learn at a rate that is appropriate to them. Opportunities are offered to enable all pupils to develop fully to their abilities. For example, through the use of Basic, Advancing, Deep (BAD) models used through teaching – children working at greater depth of understanding are able to demonstrate this through application of skills.

ICT

In science pupils will be given the opportunity to apply and develop their ICT capability through the use of ICT tools, to support their learning.

Pupils will be given the opportunity to support their work by:

- finding things out from a variety of sources e.g. internet, science apps, online videos/media
- developing their ideas using ICT tools to amend, and refine their work and enhance its quality and accuracy
- exchanging and sharing information both directly and through electronic media
- reviewing, modifying and evaluating their work, reflecting critically as it progresses

Health and Safety/Risk Management

When working with tools, equipment and materials in practical activities and in different environments, including those that are unfamiliar, pupils will be taught:

- about hazards, risks and risk control
- to recognise hazards
- to assess risks
- to manage their environment

All of the above will ensure the health and safety of themselves and others.

Assessment, Recording and Reporting

In Science we aim to give a picture of each pupil's attainment by recording the level of skills, knowledge and understanding that have been achieved. At the beginning of each Science topic teachers must ensure a baseline assessment is recorded for each pupil to identify starting points, next steps and targets.

Assessments are on-going throughout each topic and are an integral part of planning. Records are also completed at the end of each science topic to monitor pupil progress. This is completed formative through class track and teacher judgement grids against learning objectives and summatively through O-Track.

At the end of the year annual reports written by each class teacher, are presented to parents and discussed individually at the summer open evening. In all year groups each class teacher uses their on-going assessment records from O-Track to inform their reports to parents. As with Year 2 these reports are presented to parents and discussed individually at the summer open evening.

Pupils are involved in self assessments and peer partner assessment to support the AFL agenda. Success criteria are also generated by the children to meet the objectives set during sessions.

Range and types of Assessment in Science

Assessment tasks in science are often planned as group activities. However, it is also necessary to plan for and assess pupils individually. Appropriate assessment tasks linked to the National Curriculum are an essential part of the planning/assessment cycle.

Assessments can be: -

- i) National assessment tasks
- ii) completed task sheets or word cards linked to the programmes of study
- iii) a practical investigation that is planned, carried out and recorded by the pupil
- iv) a one to one dialogue with the teacher
- v) open-ended tasks which require the skills of prediction, hypothesis and questioning and fair testing
- vi) written tests based on the programmes of study and level descriptions

vii) self / peer assessment of a task / topic

In Science standardisation within each Key Stage takes place half-termly.

Moderation of work is carried out by subject leaders annually to ensure continuity and progression as well as tracking progress. This also enables strengths to be highlighted as well as indicating areas for future development.

Confidentiality

As a general rule the children's confidentiality is maintained by the teacher or member of staff concerned. If this person believes that the child is at risk or in danger she/he talks to the child protection officer, who may confer with the Principal before any decision is made.

Safeguarding

The safety, health & wellbeing of every child in our academy remains a priority at all times.

All visiting practitioners must have up to date CRB checks before they are able to work in academy. All visitors and practitioners are always supported by Class teachers or members of the Leadership Team.

All academy staff (e.g. Teachers, Curriculum Support Staff, Parents etc.) receive training regarding child protection and safeguarding in line with model protocol.

The Provision and Management of Resources

Teachers' reference material is kept in the staff room stock cupboard clearly labelled and organised into subject areas.

Our pupils are encouraged by example and encouragement to care for the academy, its environment and the equipment within it.

The science subject leaders are responsible for these areas.

Managing the Science Curriculum / Staff Development

The role of the subject leaders

- * to advise and support all members of staff in the delivery of the science curriculum
- * to advise and support teachers in planning and implementing science assessment tasks
- * to advise and support new staff to academy and ensure that they understand the science policy statement and guidelines and how to implement them
- * to be responsible for the allocated science budget and to be responsible for the organisation, maintenance and updating of science resources
- * to ensure that staff are made aware of new initiatives and developments in science both at local and national level
- * to attend relevant courses in order to update herself /himself in the subject
- * to review, evaluate and update, where necessary, all documentation governing the implementing of the science curriculum.


Sources –

National Curriculum in England: Science programmes of study

LEA Guidance on Policy Documents – “Policy in Practice”

Date of Policy July 2025

To be reviewed July 2028

Signed:  Principal

Signed:  Chair of Governors