



Broomwood Primary School



Science Policy

Introduction

This policy outlines the practises followed in the teaching of Science at Broomwood Primary School.

Rationale

The study of science allows children to learn and become curious about the phenomena and events in the world around them whilst exploring through a thematic curriculum. We believe all children should be encouraged to believe, achieve and success for a brighter future, within a positive and enjoyable atmosphere, which inspires all to learn and grow!

Aims

At Broomwood Primary School, our children foster the curiosity for science through exploration and questioning enabling them to be ready for their next stage of learning and inspire them to pursue a career within the science fields. Science should provide children with a range of learning experiences that should provide the children with a range of learning experiences which are both stimulating and relevant to everyday life. The children will have access to science in accordance with the National Curriculum 2014. It is our intention that throughout their time at Broomwood, they will achieve the following required aims:

- To develop scientific substantive knowledge and conceptual understanding through scientific disciplines of biology, chemistry, and physics.
- To develop an 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.
- To ensure that they are equipped with the scientific knowledge required to understand the uses and implications of science today and for the future.

Our Science Curriculum

At Broomwood Primary School, in Early Years we follow the Development Matters curriculum while Key Stage 1 & 2 follow the National Curriculum framework which states that Science is a core subject. Within the framework, there are programmes of study which outline what pupils should be taught and this forms the basis of the schemes of work which we are taught using Kapow to ignite our science curriculum. Our curriculum meets the aims of the National Curriculum for Science and the Ofsted Research Review into Science through the following strands:

- **Scientific knowledge and understanding of:**
 - Biology – Living organisms and vital processes.
 - Chemistry – matter and its properties
 - Physics – how the world we live in ‘works’
- **Working scientifically** – processes and methods of science to answer questions about the world around us and to practise the skills of being a scientist.
- **Science in action** – uses and implications of science in the past present and for the future. This is linked to our community’s science capital and supports children to gain an understanding of the important work done by scientists.

At Broomwood Primary School, we teach the requirements of the national curriculum through a topic-based approach making links between the key stage topic to the year group science topic where possible.

Early Years Foundation Stage provides children with the opportunity to access science as part of their Understanding the World area of learning. Children are supported to develop a strong scientific understanding of the world around them through this area of learning. From pre-school to reception, children develop strong foundations in science knowledge and understanding as well as with the skills of scientific enquiry for them to be able to be readily prepared for their next stage of learning.

Key Stage 1 provides opportunities for children to observe, explore, and ask questions about the materials and their properties, living things and physical processes. Children should use different types of scientific enquiry to answer their own questions including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests and finding things out using secondary sources of information. Children should be beginning to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways.

Lower Key Stage 2 provides opportunities for children to broaden their scientific view of the world around them and learn about a wider range of materials and their processes, living things, and physical processes. Children should do this through exploring, talking about and developing ideas about everyday phenomena. They should ask their own questions about what they observe and make some decisions about which types of scientific enquiry are likely to be the best ways of answering them including observing changes over time, noticing patterns, grouping, and classifying things, carrying out simple comparative and fair tests, and finding things out using secondary sources of information. Children should be drawing their own conclusions and use scientific language.

Upper Key Stage 2 enables children to develop a deeper understanding of a wide range of scientific ideas. Children should do this through exploring and talking about their ideas; asking their own questions about scientific phenomena; and analysing functions, relationships, and interactions more systematically. Children should encounter more abstract ideas and recognise how these ideas help them to understand and predict how the world operates and that scientific ideas can change and develop over time. They should select the most appropriate enquiry method to answer scientific questions including observing changes over different periods of time, noticing patterns, grouping, and classifying things, carrying out comparative and fair tests, and finding things out using a wide range of secondary sources of information. Pupils should draw their own conclusions based on data and observations, use evidence to justify their ideas and use scientific knowledge and understanding to explain findings.

Early Years Foundation Stage

Within the foundation stage, science is taught within the understanding the world area of learning. The Early Years Foundation Stage Statutory Framework (2024) states that practitioners guide children to make sense of their physical world and their community. In Early Years, we follow the Development Matters (2023) curriculum where our objectives are obtained from, and children are assessed against the Early Learning Goals at the end of the foundation stage. Throughout their time in Pre-school, Nursery and Reception, children experience scientific concepts within the knowledge and understanding the world area of learning. They are encouraged to observe using their senses and talk about patterns and changes as well as ask and explore questions within a thematic curriculum to make sense of the world around them.

STEM

Within our science curriculum and within other aspects of our curriculum, we include specific STEM (science, technology, engineering, and maths) related activities. At Broomwood, we appreciate the importance of STEM in the current world and for the future, and we believe that it is crucial to prepare our children for a STEM focussed future. Our aim of teaching STEM is to inspire and engage students through hands-on activities and link students understanding in science, technology, engineering, and maths. Children are provided with the foundations to understand the world around them and the impact which science has upon technology. STEM develops a sense of excitement and curiosity about natural phenomena while supporting children to use cross curricular skills. Working scientifically is a critical part of STEM as children are encouraged to apply their scientific enquiry skills to pose and

answer questions to solve a problem about the world around them and use real life engineering situations to pose a solution to a problem.

The aims of STEM teaching

- To prepare children for a STEM focussed future.
- To inspire and engage children in STEM subjects.
- To inspire the future scientist and engineers.
- To Teach children to ask a question and planning lines of investigative enquiry.
- To extend children's natural curiosity and wonder about the world.
- To help children make decisions concerning environmental, moral, and social issues.
- To develop scientific strategies and skills.
- To work cooperatively and communicate scientific skills to others.

To promote the work of scientists further, we incorporate a different scientist within each topic area. The scientist that we include not only highlight both genders but include past and present as well as other valued differences.

STEM is celebrated at Broomwood through a bi-annual STEM week celebration where there is a whole school focus and each key stage has a STEM challenge. This can then be shared with other year groups to develop a greater understanding of a concept and a wide range of visitors are invited into the school to create a real buzz and enthusiasm for the subject, as well as introducing children to the vast array of STEM career opportunities.

Equal Opportunities and Inclusion

The school welcomes and values disabled people taking an active part in school life. Broomwood Primary School is keen to make sure that we do not make it difficult for disabled children, young people, and adults to be involved in every part of school life. We have a legal duty not to discriminate against disabled people to comply with the Equalities Act 2010.

Broomwood Primary School recognises that disabled people are very diverse and include people with a physical impairment, visual impairment, hearing impairment, learning difficulty, specific learning difficulty (e.g. dyslexia), mental health issues, people who are deaf, British sign language users and people with long term health issues.

Broomwood Primary School is committed to challenging discrimination and promoting equality at all levels and in all aspects.

Gifted & Talented

At Broomwood, children are continually supported to achieve their full potential. Where a child is showing a particular gift for learning and understanding scientific phenomena, the class teacher and the subject coordinator work together to provide opportunities to extend learning further.

E-Safety

When any aspect of ICT is used, the school's E safety policy will be followed.

Methodology

Time

The legal requirement is that Science should be taught for 1.5 hours per week in Key Stage 1 and 2 hours per week in Key Stage 2. At Broomwood, we follow a 2-year thematic rolling programme however science is taught as year group specific content. The science topics are mostly linked to the key stage topic to build cross curricular and conceptual links while some science topics are taught discretely. Science is taught weekly on the timetable to ensure that children are able to access the full science curriculum.

Teaching and learning

Each unit is based on key scientific disciplines of biology, chemistry and physics and to support progression throughout the school the National Curriculum is grouped into six key areas of science.

- Plants – Covered in Y1, Y2, Y3
- Animals including Humans – Covered in Y1, Y2, Y3, Y4, Y5, Y6
- Living things and their habitats – Covered in Y2, Y4, Y5, Y6
- Materials - Covered in Y1, Y2, Y3, Y4, Y5
- Energy - Covered in Y3, Y4, Y6
- Forces, Earth, and Space - Covered in Y1, Y3, Y5
- Making Connections - Covered in Y1, Y2, Y3, Y4, Y5, Y6

The Kapow Primary Science curriculum is a spiral curriculum which lends itself to our learning approaches at Broomwood with essential knowledge and skills revisited with increasing complexity which allows pupils to revise and build upon their previous learning. At Broomwood, we provide children with a science flashback 4 at the beginning of most sessions to explicitly support with these recall skills to ensure knowledge understood throughout the whole school. A range of engaging recall activities promote frequent pupil reflection on prior learning ensuring that new learning is approached with confidence.

Learning from prior year groups is outlined in our Science progression overview to ensure that knowledge builds upon prior learning and check for misconceptions before teaching new substantive knowledge. The knowledge organisers, which are introduced at the beginning of each topic and are accessible for children, highlight their prior learning so that children can recall the facts they know and remember previous information. The knowledge organisers are then referred to throughout the topic to support children with their knowledge from one lesson to another.

Our science lessons at Broomwood are inclusive to support all learners to make progress. Teachers explicitly model learning to support understanding of subject-specific vocabulary, which is displayed around the classroom and accessible to children through the use of knowledge mats; substantive knowledge, with objectives taken from clear progression documents; and disciplinary science skills linked to working scientifically elements of the National Curriculum allowing children to then access more complete concepts.

Throughout lessons, all children have the opportunity to wonder and ask questions. This is an important element of science as children need to be able to explore and apply their knowledge and consider a range of possibilities and options. This builds creative and analytical thinkers and in turn develops a child's scientific way of thinking.

Planning, Continuity and Progression

Our science curriculum is planned with progression of substantive and disciplinary knowledge at its heart. The topics are staggered across the curriculum to build on previous learning from past year groups and provide learners with the knowledge, understanding and skills needed to access their next stage of learning.

Long Term Plan

Our whole school follows a thematic two-year rolling program with a topic-based approach for each key stage. Science is taught in specific year groups but is incorporated into this by linking the science topic to the key stage topic where appropriate. Science topics remain the same for each year group but are sometimes taught at different points of the year depending on Year A or Year B.



Whole School SCIENCE Overview – Year A



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Whole School	W7 – Black History Assembly	W1 – Book Week (literacy) W2 – Anti-Bullying day	W1 – RE Week	W2 – Book Day		W6 – History/Geography W W7 – PE/Well-being week
KS1	Childhood – Then and now	Fire	Circle of Life		What makes this place special	
Year 1	<u>Animals – Sensitive Bodies</u>	<u>Forces and Space – Seasonal Changes</u>	<u>Animals – Comparing Animals</u>	<u>Plants – Introduction to plants</u>	<u>Materials – Everyday Materials</u>	<u>Making Connections</u>
	Miller Hutchinson – Engineer who invented the electric hearing aid	Jim Cantore – Meteorologist and storm tracker	Chris Packham – Zoologist and presenter	Agnes Arber – Researched and drew plants and historical botany	Chester Greenwood – Inventor of earmuffs	
Year 2	<u>Animals – Life cycles and health</u>	<u>Materials – Uses of Everyday Materials</u>	<u>Plants – Growths</u>	<u>Living Things – Habitats</u>	<u>Living Things – Microhabitats</u>	<u>Making Connections</u>
	Maria Sibylla Merian – Published findings of life cycles with drawings	Charles Mackintosh – Inventor of waterproof raincoat	Angie Burnett – Plant Biologist who grows plants in different conditions and tests	Prem Singh Gill – Polar scientist who studies where Antarctic seals live, breed and feed		
LKS2	Stone Age to Celts	Our Brilliant Bodies	The Rotten Romans	Lights, Camera Action	The British Empire	The Rainforest
Year 3	<u>Materials – Rocks and Soil</u>	<u>Animals – Movement and Nutrition</u>	<u>Forces and Space – Forces and Magnets</u>	<u>Energy – Light and Shadows</u>	<u>Plants – Plant Reproduction</u>	<u>Making Connections</u>
	Florence Bascom – Geologist who studied the formation of mountains.	Ruth Wakefield – dietician inventing first choc chip cookie	William Gilbert – Developed theory of magnetism	Percy Shaw – Inventor of the Cat’s eye	George Washington Carver – Discovered new plants	
Year 4	<u>Materials – States of Matter</u>	<u>Animals – Digestion and food</u>	<u>Energy – Electricity and Circuits</u>	<u>Energy – Sounds and Vibrations</u>	<u>Living Things – Classification and Changing Habitats</u>	<u>Making Connections</u>
		Paul Sharpe – Bioengineer who studies how to regrow teeth	Michael Faraday – Physicist inventing first electric motor	Robert Boyle – Discovered sound travels through air	Rachel Carson – Aquatic Biologist who wrote about environmental pollution.	
UKS2	Ancient Greeks	Circuit Builders	Raging Rivers and Monstrous Mountains		How do we see?	Ancient Egypt
Year 5	<u>Forces and Space – Imbalanced Forces</u>	<u>Living Things and their Habitats – Life Cycles and Reproduction</u>	<u>Materials – Mixtures and Separation</u>	<u>Materials – Properties and Changes</u>	<u>Forces and Space – Earth and Space</u>	<u>Animals – Human Timeline Making Connections</u>
	Archimedes (287BC – 212BC) - Buoyancy Isaac Newton – Laws of motion & gravity	Jane Goodall – Close study of gorillas David Attenborough – Naturalist and TV presenter		Ruth Benerito – Chemist/Textiles Spencer Silver & Arthur Fry – Chemical engineers who invented Post-it notes.	Mae Jemison – Astronaut and first black woman in space Margaret Hamilton – Computer scientist during Apollo 11 journey.	Robert Winston – Professor of Science and Society who studies fertility and childhood (TV presenter)
Year 6	<u>Animals – Circulation and Health</u>	<u>Energy – Circuits, Batteries and Switches</u>	<u>Living Things – Classifying Big and Small</u>	<u>Living Things – Evolution and Inheritance</u>	<u>Energy – Light and Reflection</u>	<u>Making Connections</u>
	Dr Christian Barnard – First Heart transplant Professor Tu Youyou – Malaria	Alexander Volta – Invented 1 st Battery Thomas Edison – Light Bulb	Carl Linnaeus – Botanist and Zoologist who developed taxonomy for classification.	Charles Darwin – Biologist Mary Anning – Fossils	Colin Webb – Professor of Laser Physics.	



Whole School SCIENCE Overview – Year B



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Whole School	W7 – Black History Assembly	W1 – Book Week (literacy) W2 – Anti-Bullying day W6 – Spanish day	W1 – RE Week			W6 – STEM day W7 – PE/Well-being week
KS1	Who did it?	Investigating India	Superheroes		The Seaside	
Year 1	<u>Animals – Sensitive Bodies</u>	<u>Forces and Space – Seasonal Changes</u>	<u>Plants – Introduction to plants</u>	<u>Materials – Everyday Materials</u>	<u>Animals – Comparing Animals</u>	<u>Making Connections</u>
	Miller Hutchinson – Engineer who invented the electric hearing aid	Jim Cantore – Meteorologist and storm tracker	Agnes Arber – Researched and drew plants and historical botany	Chester Greenwood – Inventor of earmuffs	Chris Packham – Zoologist and presenter	
Year 2	<u>Animals – Life cycles and health</u>	<u>Living Things – Habitats</u>	<u>Plants – Growths</u>	<u>Materials – Uses of Everyday Materials</u>	<u>Living Things – Microhabitats</u>	<u>Making Connections</u>
	Maria Sibylla Merian – Published findings of life cycles with drawings	Prem Singh Gill – Polar scientist who studies where Antarctic seals live, breed and feed	Angie Burnett – Plant Biologist who grows plants in different conditions and tests	Charles Mackintosh – Inventor of waterproof raincoat		
LKS2	Buried Treasure Anglo Saxons	Buried Treasure The Vikings	Volcanoes and Earthquakes	Where does our food come from? Including Plants	Sounds Amazing	The Caribbean
Year 3	<u>Animals – Movement and Nutrition</u>	<u>Forces and Space – Forces and Magnets</u>	<u>Materials – Rocks and Soil</u>	<u>Plants – Plant Reproduction</u>	<u>Energy – Light and Shadows</u>	<u>Making Connections</u>
	Ruth Wakefield – dietician inventing first choc chip cookie	William Gilbert – Developed theory of magnetism	Florence Bascom – Geologist who studied the formation of mountains.	George Washington Carver – Discovered new plants	Percy Shaw – Inventor of the Cat’s eye	
Year 4	<u>Living Things – Classification and Changing Habitats</u>	<u>Energy – Electricity and Circuits</u>	<u>Materials – States of Matter</u>	<u>Animals – Digestion and food</u>	<u>Energy – Sounds and Vibrations</u>	<u>Making Connections</u>
	Rachel Carson – Aquatic Biologist who wrote about environmental pollution.	Michael Faraday – Physicist inventing first electric motor		Paul Sharpe – Bioengineer who studies how to regrow teeth	Robert Boyle – Discovered sound travels through air	
UKS2	Amazing Africa	Adventures in Space	Is it right to fight?		Biodiversity/Dinosaurs	The Americas
Year 5	<u>Living Things – Life Cycles and Reproduction</u>	<u>Forces and Space – Earth and Space</u>	<u>Forces and Space – Imbalanced Forces</u>	<u>Materials – Mixtures and Separation</u>	<u>Animals – Human Timeline</u>	<u>Materials – Properties and Changes Making Connections</u>
	Jane Goodall – Close study of gorillas David Attenborough – Naturalist and TV presenter	Mae Jemison – Astronaut and first black woman in space Margaret Hamilton – Computer scientist during Apollo 11 journey.	Archimedes (287BC – 212BC) - Buoyancy Isaac Newton – Laws of motion & gravity		Robert Winston – Professor of Science and Society who studies fertility and childhood (TV presenter)	Ruth Benerito – Chemist/Textiles Spencer Silver & Arthur Fry – Chemical engineers who invented Post-it notes.
Year 6	<u>Living Things – Classifying Big and Small</u>	<u>Energy – Light and Reflection</u>	<u>Energy – Circuits, Batteries and Switches</u>	<u>Animals – Circulation and Health</u>	<u>Living Things – Evolution and Inheritance</u>	<u>Making Connections</u>
	Carl Linnaeus – Botanist and Zoologist who developed taxonomy for classification.	Colin Webb – Professor of Laser Physics.	Alexander Volta – Invented 1 st Battery Thomas Edison – Light Bulb	Dr Christian Barnard – First Heart transplant Professor Tu Youyou – Malaria	Charles Darwin – Biologist Mary Anning – Fossils	

Medium Term Planning

Each area of study in the National Curriculum is set out in the Kapow Primary Science scheme for each year group and science topic. This is further broken down into key learning objectives for each half term. This forms the scheme of work used by teachers to plan the progression of activities used over the half term to deliver the curriculum. This is set out in the overview objectives overview document (appendix A) and knowledge mats for teachers to recognise the substantive and disciplinary knowledge the children should know by the end of the topic, as well as prior and post knowledge, vocabulary and a scientist linked to the learning.

Short Term Planning:

Science is taught weekly using the medium-term plans. On the short-term weekly planning document, teachers will highlight the misconceptions from the previous learning which they will be addressing from the prior session. When investigations are linked to literacy and numeracy, lessons are planned on the weekly literacy and numeracy plans.

EYFS Long Term Planning

The long term plan for Science in Early Years allows for a development of progression as children move from pre-school to nursery and onto reception. The EYFS curriculum follows a thematic approach with each term based around a key enquiry question. Teachers plan from the key topic enquiry question and science is linked to this through a topic area that can be explored as a focus in one week out of the half term as well as during continuous provision in and outside of the classroom.

EYFS Medium Term Planning

Each half term has a set of focus questions to be covered throughout the topic. Science makes up one of these key questions each half term as set out with the Early Years Lead and the Science Lead. This is used by the teachers in their short term planning to provide the progression of skills throughout the science topics.

EYFS Short Term Planning

Short term planning highlights how the question will be addressed through carpet sessions, focus work and in continuous provision. Teachers use the enquiry question based on science and understanding the world to plan engaging activities and how to use the environment to support all children to meet the objective.

Cross Curricular Links

Where possible, science is integrated into our thematic curriculum with links to other subjects and topics. Sometimes, science is taught discretely to ensure that all substantive and disciplinary knowledge objectives are covered. Science is linked very closely to maths where there is a crossover in necessary skills to access the science curriculum. There is some disparity between the expectation of maths objectives and where they can be found in the science curriculum however teachers are made aware of these elements and understand the importance of explicitly teaching the maths knowledge during the science lesson.

Science understanding can be taught through a range of non-fiction texts across the school with guided reading sessions, comprehension activities or independent reading books. Children frequently apply their science knowledge and understanding in literacy when writing about a concept they have been learning about or to explain their enquiry process during an investigation.

STEM also lends itself to a cross curricular approach as the subjects of science, maths, engineering and technology are taught closely together with children applying the substantive and disciplinary knowledge of science, their understanding of maths concepts, and the practical making and evaluating skills of engineering and technology all together in one area of learning.

Adaptive Teaching

For all children to be able to access the science curriculum, the work will be presented in a variety of ways allowing for the needs of all children to be met. Individuals or groups will be catered for through breaking down the task/objective into smaller achievable goals or extending the children using additional, more complex, adjectives. Kapow also offers guidance for adapting each lesson to ensure that all children are able to access the learning and opportunities to stretch pupils' learning are available when required.

Our science teaching incorporates various strategies from independent tasks to paired and group work, including practical, creative, computer-based and collaborative tasks. This variety means that lessons are engaging and appeal to those with different learning styles and adaptive to ensure that practise is inclusive to all pupil groups. The multi-sensory approach of teaching at Broomwood lends itself to teaching science as children can use their strengths to access the complete science curriculum through exploration and practical ways of working. Concrete resources are used in science teaching to support children's understanding to allows complex concepts to be accessed by all. The use of questioning, including open-ended questions, is also a valuable tool when tailoring the learning to individual needs and adaptation of methods of recording ensures that writing is not a barrier to understanding scientific concepts.

Resources

Resources for the planning and delivery of the science curriculum are stored centrally. Equipment is stored in the Science cupboards in the dinner hall and is broken down into the 3 strands of biology, chemistry and physics. All resources are organised in a box related to each of the areas of study according to the science curriculum at Broomwood. To maintain good quality resources, the science co-ordinator should be informed of any breakage or loss and ensure that an annual audit with resources occurs to make sure that equipment maintains in good order and consumable resources are replaced.

Enhancements

At Broomwood, we recognise the needs of our community and the importance of enhancing the curriculum to boost our science capital. To support our children develop their knowledge of science as well as enthusiasm for the subject we provide a range of enhancements. These include:

- Weekly forest school sessions for reception, Year 1 and Year 2. These sessions take place in our brand new outdoor classroom with the dedicated forest school leader. This provides children with opportunities to experience learning outdoors and to further embed science concepts about the world around them. These hands on experiences show children the application of science and give a deeper understanding to the subjects learnt in class.
- Science club run by the science and STEM lead show children wow moments in science and allows children to have fun while learning about new science concepts. Children enjoy this extra-curricular opportunity as it provides children who have a passion for science to explore the subject in more depth with an experienced teacher.
- Visitors into school enrich the curriculum at Broomwood by bringing their own experience of the subject into the classroom. Inviting a range of parents and members of our local community into school brings science to life for our children as they can begin to recognise the vast array of science and STEM career opportunities available to them and the possibilities a career in science can have. By having hands-on experience, our children are able to understand the importance can have in the wider world.
- Experiential visits to school provide exciting learning opportunities for our children through interesting approaches. At Broomwood, we have had visits from the Star Chaser rocket, a range of animal workshops, and the Wonderdome inflatable planetarium to name a few, which have enhanced our curriculum by embedding science objectives through first hand experience and awe-inspiring moments.
- Science trips enhance our Science offer at Broomwood as it provides children with the opportunity to see science in the real world outside of the school gates. Trips can include to the forest when learning about habitats, farms when learning about lifecycles, garden centres and allotments when learning about

growing and planting. Supporting our children's wider development through these opportunities means that children are able to see science in another setting and apply their knowledge, understanding and skills.

Assessment and Recording

Assessment is a continuous process and is a central feature of teaching and learning. Science is assessed in line with the Broomwood Assessment Policy (see policy).

Long Term assessment

- Written report to parents.
- Annual curricular targets.
- Target Tracker completed indicating below, expected or exceeding.
- Whole school science data will be analysed annually to create a report to show areas to celebrate as well as areas which need addressing as a focus.

Medium Term assessment

- Summative assessment is built into each unit through a unit quiz and a knowledge and skills catcher. Kahoot quizzes can be used to check progress and ensure that all children have made a good level of progress. Misconceptions from these methods can be caught and addressed in the moment to ensure that children have a good level of understanding before covering the topic in subsequent years and key stages.
- Head start assessment progress tests are carried out each term to assess disciplinary and substantive knowledge. This provides a scaled score which is then analysed to check the progress of pupil groups across the school and provide valuable data for the teachers to inform their end of year teacher assessment.

Short Term assessment

- Annotation on weekly planning will ensure that teachers are recognising misconceptions from their marking.
- Marking of work in science books happens according to the whole school assessment policy.

Health and Safety

Generally, primary science is a safe activity but when pupils are engaged in a variety of open-ended investigations, there is always the possibility that something could go wrong. Where there is a risk, staff will be vigilant, and a risk assessment is carried out for each activity in the classroom and outdoor environment. Areas where particular care is needed are indicated in the scheme of work for science.

To ensure safe practises in science, all staff will ensure:

- COSHH (Control of Substances Hazardous to Health) regulations are followed.
- No chemicals are to be used until a risk assessment has been carried out.
- Reference is made to the ASE health and safety guidelines in the CLEAPSS 'Be Safe' book which is accessible to all staff in a central location.
- No mains powered electrical equipment will be brought in from home by staff unless it is safe, appropriate for the age of the pupils and has been checked according to the LEA safety check criteria.
- Teachers keeping animals in their classrooms will adopt safe practise outlined in 'Be Safe' and will take due regard to pupil's allergies and possible health concerns.

Role of the Co-ordinator

The co-ordinator will lead the school in the teaching of science through:

- Good practise
- Organisation and purchase of resources
- Attending relevant courses
- Monitoring planning
- Work scrutiny
- Lesson observation and feedback
- Help and support for all staff
- Identification of strengths and weaknesses in the school
- Setting curricular targets
- Reports to Staff, Head and Governors

Review of Policy

This policy will be reviewed and revised in line with developments in the National Curriculum and the School Improvement Plan

Revised April 2024 by Grace Conlon

Approved by Governing Body _____ Date _____