Science Policy

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Farndon Primary School

EQUALITY SCHEME EQUALITY IMPACT ASSESSMENT FOR SCIENCE POLICY	
Staff / Committee involved in development:	Teaching and Learning Committee; Headteacher
For use by:	Staff, Governors and Parent/Carers
This policy relates to statutory guidance:	
Key related Farndon Policies:	Computing Policy Geography Policy Sex and Relationships Policy SMSC Policy Teaching, Learning and Assessment Policy

Equality Impact Assessment: Does this document impact on any of the following groups? If YES, state positive or negative impact, and complete an Equality Impact Assessment Form or action plan, and attach.

Groups:	**Yes/ No**	**Positive/Negative impact**
Disability	No	
Race	No	
Gender	No	
Age	No	
Sexual Orientation	No	
Religious and Belief	No	
Gender Reassignment	No	
Marriage & Civil Partnership	No	
Pregnancy & Maternity	No	
Other	No	

Reviewed by	Teaching and Learning

Intent

The 2014 national curriculum for science 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 skills required to understand the uses and implications of science, today and for the future. We understand that it is important for lessons to have a skills-based focus, and that the knowledge can be taught through this

At Farndon Primary School, we encourage children to be inquisitive throughout their time at the school and beyond. The Science curriculum fosters a healthy curiosity in children about our universe and promotes respect for the living and non-living. We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. Throughout the programmes of study, the children will acquire and develop the key knowledge that has been identified within each unit and across each Milestone.
The key knowledge identified by each year group is informed by the national curriculum and builds towards identified phase 'end points' in accordance with NC expectations.
Science teaching is carefully sequenced to ensure a clear progression of **substantive knowledge** and **disciplinary knowledge**. Each lesson is designed to explore and build on children's prior knowledge, allowing for misconceptions to be addressed effectively. The substantive knowledge builds progressively to develop children's understanding of concepts, models, laws and theories.

The disciplinary knowledge builds progressively to enable children to work scientifically and covers the following aspects:

- **Enquiry Planning:** Methods used to answer questions
- **Scientific Enquiry:** Using apparatus and techniques
- **Enquiry Recording**: Data analysis
- **Enquiry Evaluation**: Using evidence to develop explanations

This disciplinary knowledge is also mapped for each Milestone and are progressive throughout the school. These too ensure systematic progression to identified skills end points which are in accordance with the Working Scientifically skills expectations of the national curriculum.
The curriculum is designed to ensure that children are able to acquire key scientific knowledge through practical experiences; using equipment, conducting experiments, building arguments and explaining concepts confidently.

The school's approach to science takes account of the school's own context, ensuring access to people with specialist expertise and places of scientific interest as part of the school's commitment to learning outside the classroom. Cross curricular opportunities are also identified, mapped and planned to ensure contextual relevance. Children are encouraged to ask questions and be curious about their surroundings and a love of science is nurtured through a whole school ethos and a varied science curriculum.

Implementation

Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all pupils are capable of achieving high standards in science. Our whole school approach to the teaching and learning of science involves the following;

- Science will be taught in planned and arranged topic blocks by the class teacher, to have a project-based approach. This is a strategy to enable the achievement of a greater depth of knowledge.
- Existing knowledge is checked at the beginning of each topic, as part of the Fluent in Five strategy. This ensures that teaching is informed by the children's starting points and that it takes account of pupil voice, incorporating children's interests.
- Through our planning, we involve problem solving opportunities that allow children to apply their knowledge and find out answers for themselves. Children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers. This curiosity is celebrated within the classroom. Planning involves teachers creating engaging lessons, often involving high-quality resources to aid understanding of conceptual knowledge. Teachers use precise questioning in class to test conceptual knowledge and skills and assess pupils regularly to identify those children with gaps in learning, so that all pupils keep up. Tasks are selected and designed to provide appropriate challenge to all learners, in line with the school's commitment to inclusion.
- We build upon the knowledge and skill development of the previous Milestone. As the children's knowledge and understanding increases, they become more proficient in selecting, using scientific equipment, collating and interpreting results, they become increasingly confident in their growing ability to come to conclusions based on real evidence.
- Working Scientifically skills are embedded into lessons to ensure that skills are systematically developed throughout the children's school career and new vocabulary and challenging concepts are introduced through direct teaching. This is developed through the years, in-keeping with the topics.
- Teachers demonstrate how to use scientific equipment, and the various Working Scientifically skills in order to embed scientific understanding. Teachers find opportunities to develop children's understanding of their surroundings by accessing outdoor learning and workshops with experts.

- Children are offered a wide range of extra-curricular activities, visits, trips and visitors to complement and broaden the curriculum. These are purposeful and link with the knowledge being taught in class.
- Regular events, such as Science Week or project days within the STEM team, allow all pupils to come off-timetable, to provide broader provision and the acquisition and application of knowledge and skills. These events often involve families and the wider community.
- At the end of each topic, key knowledge is reviewed by the children through the Fluent in Five assessments and rigorously checked by the teacher and consolidated as necessary.

Impact

The successful approach at Farndon Primary results in a fun, engaging, high-quality science education, that provides children with the foundations and knowledge for understanding the world. Our engagement with the local environment ensures that children learn through varied and first hand experiences of the world around them. Frequent, continuous and progressive learning outside the classroom is embedded throughout the science curriculum.

Through various workshops, trips and interactions with experts and local charities, children have the understanding that science has changed our lives and that it is vital to the world's future prosperity. Children learn the possibilities for careers in science, as a result of our community links and connection with national agencies including the STEM association. They learn from and work with professionals, ensuring access to positive role models within the field of science from the immediate and wider local community. From this exposure to a range of different scientists from various backgrounds, all children feel they are scientists and capable of achieving. Children at Farndon Primary enjoy science and this results in motivated learners with sound scientific understanding.

Curriculum

The children undertake a broad and balanced programme that takes account of abilities, aptitudes and physical, emotional and intellectual development. This is achieved by following the White Rose science scheme of work. Through science lessons the children learn a range of skills, concepts, attitudes and methods of working.

Teaching and Learning

The White Rose science curriculum is mapped to ensure alignment with the national curriculum content and programme of study. Key knowledge relates directly and builds towards the achievement of end of phase (KS1, Lower KS2 and upper KS2) 'end points', informed by the National Curriculum statements.
Key skills are also mapped so that these are developed systematically and align directly to the specified working scientifically statements as outlined in the NC for each phase. At the start of each science topic, teachers share with the pupils the knowledge organiser which includes key vocabulary and "sticky" facts and knowledge. It also includes a "quick quiz" to recall prior learning.

The beginning of each session begins with reviewing the previous knowledge and vocab. In each lesson, children are guided towards the learning intention through the use of success criteria. The LT and success criteria are shared at the beginning of the lesson and reviewed by children at the end. They are subsequently used by the teacher during the assessment and review of children's work. A working wall will be used to support and celebrate learning throughout each unit of work and will include key vocab. This will also be used to support the acquisition of key knowledge and will support the accurate use of an extended specialist vocabulary.

To ensure a common ethos in the teaching and learning of science, staff and children were involved in the creation of the pedagogical approach through the Cornerstones of Learning:

Science is good when;

- We apply our 'working scientifically skills' to solve problems, explore, observe and investigate.
- We ask questions and work together to discover the answers
- Science has a wow factor and promotes a sense of awe and wonder
- Our learning is enhanced by outdoor learning, specialist visitors and we have access to quality resources
- We are involved in creating and carrying out investigations and can share and explain our ideas and conclusions

To ensure excellence across the school in the teaching and learning of science:

- Children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers. This curiosity is celebrated within the classroom.
- Teachers ask a range of questions which enable all children to take part, listening carefully to answers and taking learning forward, using open and closed questions and allowing children time to think.
- Planning involves teachers creating engaging lessons, often involving high-quality resources to aid understanding of conceptual knowledge.
- Teachers use precise questioning in class to test conceptual knowledge and skills, and assess pupils regularly to identify those children with gaps in learning, so that all pupils keep up.
- New vocabulary and challenging concepts are introduced through direct teaching. This is developed through the years, in-keeping with the topics.
- Working Scientifically skills are embedded into lessons and these focus 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 include: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources. Pupils are given opportunity to seek answers to questions through collecting, analysing and presenting data.
- The key knowledge for each topic and across each year group is mapped across the school and checked at the end of each science topic.
- Teachers demonstrate how to use scientific equipment, and the various Working Scientifically skills in order to embed scientific understanding.
- Teachers find opportunities to develop children's understanding through learning outside the classroom.

- Science lessons provide a quality and variety of subject specific language to enable the development of children's confident and accurate use of scientific vocabulary and their ability to articulate scientific concepts clearly and precisely. Children are encouraged and assisted in making their thinking clear, both to themselves and others, and teachers ensure that pupils build secure foundations by using discussion to probing and remedying their misconceptions.

Early Years

The teaching of science in EYFS is in accordance with the EYFS national framework. Children are guided to make sense of their physical world and community through opportunities to explore, observe and find out about people, places, technology and the environment. They are assessed according to the Development Matters attainment targets.

Key Stage 1

The principal focus of science teaching in key stage 1 is to enable pupils to experience and observe phenomena, looking more closely at the natural and humanly-constructed world around them. At Farndon Primary, children are encouraged to be curious and ask questions about what they notice.
Their understanding of scientific ideas is supported through the use of different types of scientific enquiry so that children can 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 are supported to begin 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, including wider school forums such as science week. Most of the learning about science is done through first-hand practical experiences, and children are also to begin to use appropriate secondary sources, such as books, photographs and videos.

'Working scientifically' is described separately in the National Curriculum programme of study, but is always taught through and clearly related to the teaching of substantive science content in the programme of study. The knowledge and skills progression maps outline how the specific skills of each unit progressively build between years and towards the overarching 'end point statements'. Throughout the notes and guidance, examples show how scientific methods and skills might be linked to specific elements of the content. Opportunities are provided for the children to read and spell scientific vocabulary at a level consistent with their increasing word reading and spelling knowledge at key stage 1.

Lower Key Stage 2

The principal focus of science teaching in lower key stage 2 is to enable pupils to broaden their scientific view of the world around them. They do this through exploring, talking about, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments, and by beginning to develop their ideas about functions, relationships and interactions.
Children are encouraged and supported to 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. They draw simple conclusions and use some scientific language, first, to talk about and, later, to write about what they have found out.

As in KS1, 'Working scientifically' is described separately in the National Curriculum programme of study, but is always taught through and clearly related to the teaching of substantive science content in the programme of study. The knowledge and skills progression maps outline how the specific skills of each unit progressively build between years and towards the overarching 'end point statements'. Throughout the notes and guidance, examples show how scientific methods and skills might be linked to specific elements of the content. Opportunities are provided for the children to read and spell scientific vocabulary.

Upper Key Stage 2

The principal focus of science teaching in upper key stage 2 is to enable pupils to develop a deeper understanding of a wide range of scientific ideas. At Farndon Primary, children do this through exploring and talking about their ideas; asking their own questions about scientific phenomena; and analysing functions, relationships and interactions more systematically.
At upper key stage 2, they encounter more abstract ideas and begin to recognise how these ideas help them to understand and predict how the world operates. Children are also supported to begin to recognise that scientific ideas change and develop over time. The school curriculum provides opportunities for children to select the most appropriate ways to answer science questions using different types of scientific enquiry, 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.
Children learn to draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings.
'Working and thinking scientifically' is described separately at the beginning of the programme of study, but must always be taught through and clearly related to substantive science content in the programme of study. Throughout the notes and guidance, examples show how scientific methods and skills might be linked to specific elements of the content. Opportunities are provided for the children to read, spell and pronounce scientific vocabulary correctly

Spiritual, moral, social and cultural development

Spiritual development:

- Looking for meaning and purpose in natural and physical phenomenon
- Wonder about what is special about life
- An awareness of the scale of living things from the small micro-organism to the largest
- The interdependence of all living things and materials of the Earth.
- Emotional drive to know more and to wonder about the world
- Wonder at the vastness of space and the beauty of natural objects

Moral development:

- Pupils to become increasingly curious
- Development of open mindedness to the suggestions of others
- Scientific developments may give rise to moral dilemmas
- Considering the environment

Social development:

- Group practical work
- Team working skills and to taking responsibility
- Taking responsibility for their own and other people's safety
- Understanding that science has a major effect on the quality of our lives
- Consider the benefits of scientific developments and the social responsibility involved

Cultural development:

- Scientific discoveries as a part of our culture
- Scientific discoveries of other cultures
- Scientific discoveries by a wide range of men and women in many different cultures
- Environmental issues are central to science.

Planning and Resources

Planning is a collaborative process and each class teacher plans with their Milestone group partners. Teachers have access to the Department for Education Science Scheme of Work and Twinkle plans to inform their planning and lesson design. Key knowledge and skills, in line with the National Curriculum are mapped on the whole school 'Science Knowledge and Skills Progression Map' and this shows the key knowledge and skills of each unit and how they build through the school.
The school's own context is also considered and opportunities for learning outside the classroom, including the use of specific school resources (pond area or wooded area) and relevant educational visits, are included on the map and are planned by teachers. Cross curricular links are also mapped to further support the contextual relevance of the science curriculum.
High-quality science resources to support the teaching of all units and topics from EYFS to Y6, are used consistently and maintained by the subject leader. These are kept in a central store in the original building's main corridor and are labelled and easily accessible to all staff. As well as these, the EYFS classes have a range of resources for easy access to children during exploration.

Progress and Achievement

Children are monitored on a regular basis to check progress. We encourage all pupils to take responsibility for their own and their peers learning. A range of Assessment for Learning strategies are used, for example peer marking – the children regularly peer mark and are encouraged to comment on each others' work using vocabulary related to the knowledge and skills taught. We also use fluent in five questioning that relates to the key vocab and sticky facts. Through these, both children and adults are able to recognise the progress being made

Assessment and Recording

As part of the introduction to each new science topic, teachers review what the children know already and identify what they would like to learn. This is achieved via the Knowledge Organiser that is stuck in each pupils' science book.
Lessons are planned to ensure that key knowledge is developed over time, over the course of each science block and in the correct sequence. Key knowledge is reviewed by the children and rigorously checked and consolidated by the teacher at the end of each unit of work through a

Fluent in Five Assessment task that is stuck in their Science book. Lessons within each unit are also planned to ensure the systematic development of the key identified skills across the school. By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study as set out in the National Curriculum. These are set out as statutory requirements. We also draw on the non-statutory requirements to extend our children and provide an appropriate level of challenge. Children receive effective feedback through teacher assessment, both orally and through written feedback in line with the success criteria.

Children are guided towards achievement of the main objective through the use of process-based 'success criteria', provided by and explained by the teacher. Children refer to these during the lesson and they precede outcomes of work in children's books. The success criteria are used to identify areas of difficulty by children and teachers when reviewing and assessing work. Ongoing assessment also includes:

- Observing children at work, individually, in pairs, in a group, and in classes.
- Questioning, talking and listening to children
- Considering work/materials / investigations produced by children together with discussion about this with them
- Fluent in Five assessment tasks
- In EYFS, we assess the children's Understanding of the World according to the Development Matters statements.

Monitoring

Monitoring takes place regularly through sampling children's work, and teacher planning, through a book scrutiny, lesson observations and pupil voice.

Equality

At Farndon Primary school, we are committed to providing a teaching environment which ensures all children are provided with the same learning opportunities regardless of social class, gender, culture, race, special educational need or disability. Teachers use a range of strategies to ensure inclusion and also to maintain a positive ethos where children demonstrate positive attitudes towards others.

Inclusion

Science teaching considers the needs of different individuals and groups for learners and tasks are designed and differentiated as appropriate to ensure an appropriate level of challenge. Supporting adults are also deployed effectively to ensure focussed support where this is necessary.

Teachers use a range of inclusion strategies, including paired work, open questions and direct, differentiated questioning and the activation of prior knowledge and contextual learning. This support the inclusion and motivation of all learners ensuring that optimum progress is made throughout each part of the lesson.

Roles and Responsibilities

The subject is led by Laura Copper. Each year time is set aside to review standards and monitor curriculum provision and ensure training and resources are up to date.

Health and Safety

Visits and fieldwork are an essential part of the Science Curriculum helping to develop geographical enquiry and skills. Children learn best when the learning environment is ordered and they feel safe, any visit should be well organised and provide a stimulating and valuable experience. The pupils should prepare well for the visit and, on their return, use the experience to good effect in the classroom. The class teacher, or leader, should plan the visit meticulously, with the pupils' safety and welfare paramount. Please see the Policy for Educational Visits for detailed information and the subject risk assessment.

Role of Science Leader:

The subject leader's responsibilities are:

- To ensure the high profile of the subject and provide a strategic lead and direction for science in the school.
- To maintain and ensure use of the central supply of science resources, in accordance with those specific to each year group and topic
- To support colleagues in their teaching of science and support the CPD of others
- To ensure progression of the key knowledge and skills identified within each unit and that these are integral to the programme of study and secure at the end of each age phase.
- To monitor books and ensure that key knowledge is evidenced in outcomes, alongside and as supported, by SMT
- To monitor planning and oversee the teaching of science
- To lead further improvement in and development of the subject as informed by effective subject overview
- To ensure that the science curriculum enables the progress and raises the attainment of all pupils, including those who are disadvantaged or have low attainment
- To ensure that the science curriculum take account of the school's context, promotes children's pride in the local area and provides access to positive role models from the immediate and wider local area to enhance the science curriculum.
- To ensure that approaches are informed by and in line with current identified good practice and pedagogy; to attend regular opportunities for CPD, including borough forums and PSQM sessions (to maintain the school's achievement of the (PSQM) and disseminate findings.
- To establish and maintain existing links with external agencies and individuals with specialist expertise to enrich teaching and learning in science.
- To organise an annual whole-school science week, in accordance with the national theme, ensuring a focus on practical and investigative activities. The subject leader has specially-allocated time for fulfilling the task of reviewing samples of children's work, training, liaising with other subject leaders from other schools and organising science week.

Role of the Head Teacher:

- To lead, manage and monitor the implementation of the scheme of learning.

- With the Science leader and responsible governor, keep the governing body informed about the progress of the subject and the scheme of work.
- Ensure that Science remains a high profile subject in the school's development work.

Last Updated: September 2024

Review date: September 2026

Signed:

Appendix 1: Intent Curriculum Overview

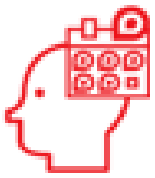
Milestone 1 Science		
Superheroes	**It Began in Africa**	**Ahoy there**
Seasons Materials	Animals Including Humans	Plants
Pole to Pole	**Fire Fire**	**Once Upon a Time…**
Seasons Materials	Animals Including Humans	Plants
Milestone 2 Science		
All Started in a Cave	**Survival**	**They Came, They Saw they conquered!**
Light and Shadow Rocks, soils and fossils	Food chains / Environment Electricity	Forces and magnets Sound
Dungeons and Dragons	**Streetwise**	**It's All Greek to Me**
Water Cycle and changes of state Skeleton / Muscles	Digestion System Nutrition Teeth	Parts of a Plant
Milestone 3 Science		
Child of Our Time	**Endangered**	**Walk Like an Egyptian**
Healthy Eating Heart and Circulatory system	Classification / Life Cycles Evolution	Properties of materials Changes in matter (Reversible / Irreversible)
Traders and Raiders	**Out of this World**	**Let Me Entertain You**
Forces	Earth and Space Light	Electricity
Milestone 1 Knowledge Mat		Science Curriculum Milestone 1
Milestone 2 Knowledge Mat		Science Curriculum Milestone 2
Milestone 3 Knowledge Mat		Science Curriculum Milestone 3
Subject Risk Assessment		Risk Assessment - Science.docx

Appendix 2: Teaching pedagogical approach

Farndon School's Teaching and Learning Pedagogy for Science

The Four Cornerstones of Learning

FARNDON'S CORNERSTONES TO LEARNING IN SCIENCE

Think	**1**	Begin each theme retrieving from memory what they already know with a **"quick quiz".** At the start of each session, revisit previous substantive knowledge taught through a **"flashback".**	
	2	Engage pupils with **enquiry question** each lesson based on substantive knowledge. New knowledge broken down step by step – achieved by following White Rose scheme. Only move on to innovate once mastered.	
Learn	**3**	Teacher models. Use principle **I do….We do… You do…..**Show **WAGOLL.** Teacher models **"how to think"** by thinking aloud and articulating their own thought processes. Support pupils to think like a SCIENTIST using their knowledge when engaged in scientific enquiry (disciplinary knowledge)	
	4	Check for pupil understanding by asking deeper questions. Use **Q matrix** for retrieval of substantive knowledge. Use **Bloom's matrix** for inquiry type questioning that's more open. The scheme also offers example questions.	
	5	Provide **scaffolds** to either support pupils in their learning so that it is accessible, or to help them to effectively organise it – such as **science enquiry frame** or **visual thinking frames**. For those pupils who need it, guided practice. Check pupils' understanding through on the spot verbal feedback and whole class feedback.	
Explore	**6**	Embed knowledge through independent practice. Once new knowledge is embedded, look to apply through the disciplinary knowledge in their own scientific enquiry.	
Evaluate	**7**	End each session with a review of the knowledge learnt that day. At the end of each theme, complete **fluent in five check** and then write what they now know.	

Appendix 3: Fluent in Five Assessment Example

Fluent in Five: Properties of Materials

Match each object to the material that it is most likely to be made from.

milk bottle	wood
saucepan	plastic
cupboard	metal

Tick the transparent object.

nail glass bag rock

Tick **two** objects that are opaque.

nail glass bag rock

The diagrams show a different material in each circuit.

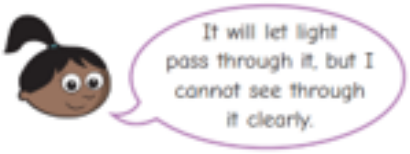
Is the material a conductor of electricity or not?

Circle your answers.

conductor **not a conductor**

conductor **not a conductor**

Sam is describing a material.



Which word describes Sam's material?

Tick your answer.

translucent opaque transparent

Choose a word to complete each sentence.

insulator magnet conductor

An electrical _____ does not allow electricity to pass through.

Here is a cooking pan with two parts labelled, A and B.

Which part of the cooking pan is made from wood? _____

Why do you think it is made from wood?

_____

_____

Which part of the cooking pan is made from metal? _____

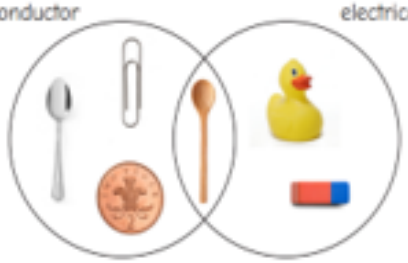
Why do you think it is made from metal?

_____

_____

Whitney has sorted some objects.

electrical conductor electrical insulator



Do you agree with Whitney? _____

Explain your answer.

_____

_____

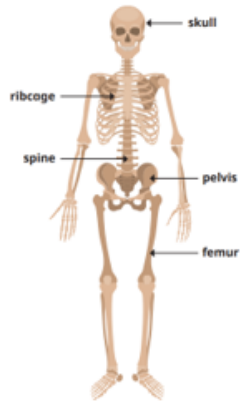
Suggest another object that is an electrical conductor.

_____

Appendix 4: Knowledge Organiser Example (Milestone 2)

Science Knowledge Organiser		
I already know……	**True**	**False**
Humans taste things with their teeth.		
Our skin helps us to sense touch.		
There are 3 basic senses: see; hear; smell.		
Exercising is bad for your heart as it makes it work harder.		
Our neck supports our head.		

Biology: Skeleton

Focus	Vocab	Sticky Facts
Biology: Skeletons  	Skeleton Pelvis Rib cage Spine Skull Rib cage Vertebrate Invertebrate Exoskeleton	• The longest bone is the femur; it helps us stand and move. • Skeletons provide support, protection and provide movement. • An adult human typically has 206 bones. • Bones have different jobs: the skull protects our brain and our ribs protect our heart and lungs. • The spine helps us twist and move. • Spine is known as the backbone. It is a strong, flexible column and protects the spinal chord. • Mammals, birds, fish, reptiles and amphibians have a skeleton. • Some animals don't have a skeleton like insects. • Some animals have an exoskeleton.