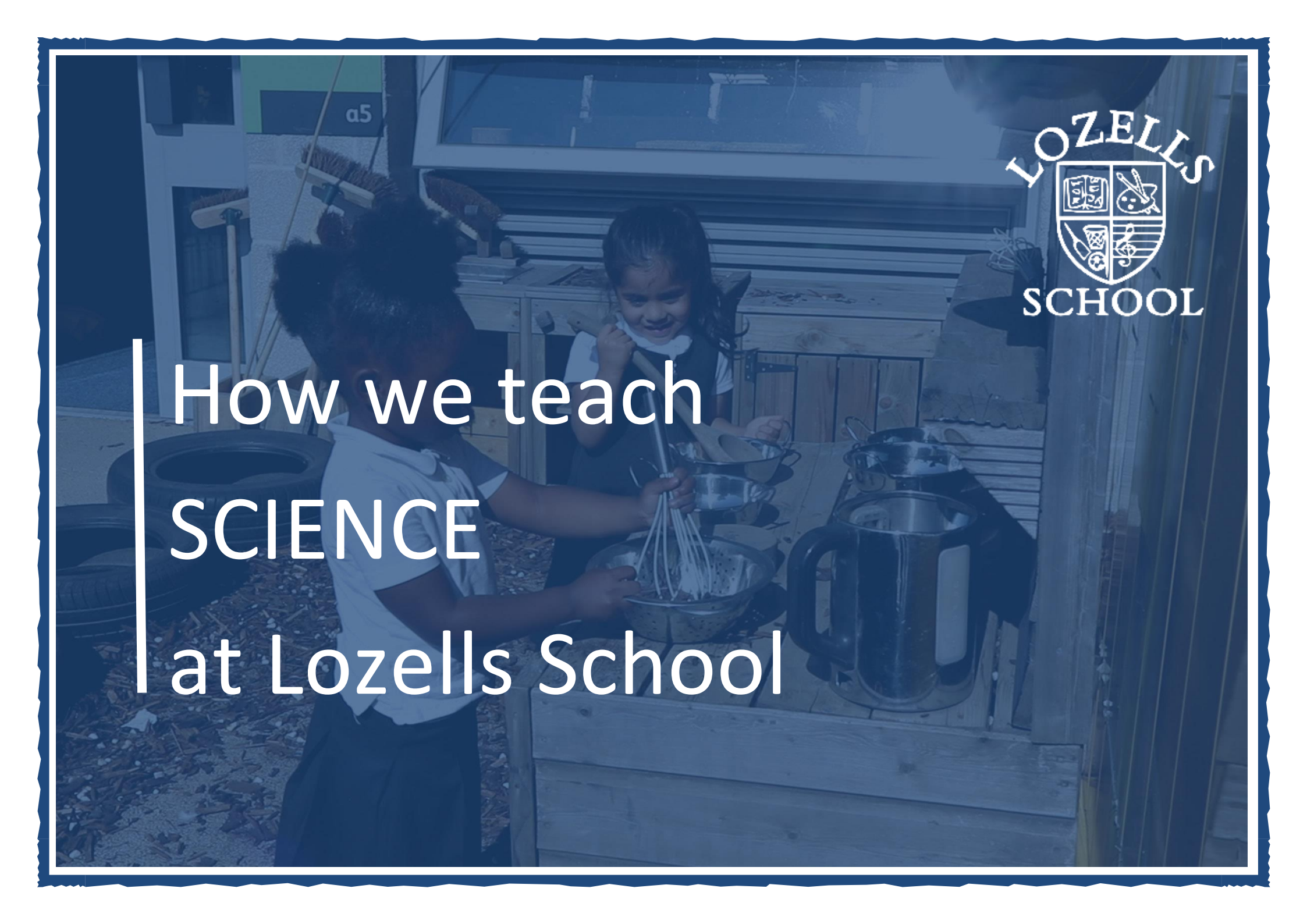


How we teach SCIENCE at Lozells School

Contents Page

Our vision:

To teach and nurture the children of our community is a privilege.

Our families and children are ambitious for themselves and supportive of one another in a way that simply defines 'community'.

Our vision is for all our children to know that they are valued, can make a difference and can achieve great things through hard work and perseverance.

Our ethos is:

Everyone is entitled to be the best they can be.
We will enable children to learn, challenge them to think hard and guide their growth as young people.

They are their own future, their family's future, our future.
Our children have differences, character and voices and we encourage this!

1. Subject Vision Statement

We recognise the importance of science in every aspect of daily life and encourage children to be inquisitive throughout their time at our school and beyond. Our science curriculum is knowledge and vocabulary rich, ensuring children gain a deep understanding of fundamental scientific knowledge and concepts, as well as embedding key science specific vocabulary and terminology. In addition, children are encouraged to develop their scientific curiosity and understanding by working scientifically. We enable children to acquire key scientific knowledge through practical experiences; using equipment, conducting experiments, building arguments and explaining concepts confidently. Children are encouraged to ask questions and be inquisitive about their surroundings and their questions are investigated and explored. Our curriculum is accessible to all learners and a love of science is nurtured through a whole school ethos and a varied science curriculum.

2. BUILDING ON THE SCHOOL CURRICULUM DRIVERS

Healthy Advocates

Our children understand what it means to be a healthy, fit and happy both physically and mentally and will value this; taking positive action for themselves and supporting their peers with this.

Our science curriculum gives children the knowledge and understanding required to care for themselves both physically and mentally. Not only are the children taught scientific concepts related to the body and their general health but we enrich the curriculum with the use of our school nurse and outside agencies whilst making links to other subjects such as PE.

Respectful Citizens

Our children have respect for themselves and the voice, thoughts, feelings and beliefs of others; respecting the diversity our wonderful world has. Our children will gain an understanding of their emotions and have skills to resolve disagreements. Our children will be responsible citizens and know how to speak up against prejudice or injustice.

Our children are given the opportunity to learn about key figures in Science and those who have hugely impacted the science field. There are a diverse range of scientists that we learn about and the children are encouraged to discuss the achievements of various scientists and the impact they have had on the world.

Confident Communicators

Our children communicate their thoughts, ideas and opinions in a clear and confident manner through speech, writing and the safe use of online platforms. Our children are bold enough to say what is fair, make mistakes and unravel new learning through discussion with their peers. Our children understand how to listen and facilitate a respectful space for others to communicate also.

Our vocabulary rich curriculum encourages our children to use technical vocabulary. Being exposed to such language and having the opportunity to have an understanding of the language in depth, ensures that our children can confidently communicate their newly acquired knowledge, thoughts and ideas.

Aspirational Learners

Our children have self-belief and high expectations of themselves; setting goals and working hard to achieve them both in school and at home. Our children know that mistakes = learning and understand that learning should be challenging. Our children are passionate about life-long learning and understand that great achievement starts with aiming high and believing we will.

Our curriculum is designed to encourage scientific enquiry and making mistakes forms part of this, in the sense that the children are expected to investigate their own ideas through trial and error. Our children have the opportunity to meet and talk with working scientists and have the understanding that they too can aspire to work in the science field.

Knowledgeable Scholars

Our children have gained and understood a range of important foundational knowledge across all subjects which they will be able to build future learning upon. Our children strive to learn more, know more and put their knowledge into practice. Our children are curious about sources of knowledge and understand bias, perspective and influence. Our children have explored how knowledge has changed the world and how great inventions have come from a place of expertise.

Our curriculum design encourages cross-curricular links between subjects and allows the children to revisit learning. This means that the children are able to transfer their skills, build on their prior knowledge and consolidate their learning, providing our children with the opportunity to master key aspects of the curriculum and giving all children the ability to become knowledgeable scholars.

Successful Achievers

Our children understand the learning process, reflect on their own learning and are self-motivated to learn more and work to remember more. Our children work hard to be the best that they can be, have bold ambitions and overcome challenges through perseverance and determination. Our children take pride in their personal accomplishments and celebrate the achievements of their peers, providing motivation and encouragement.

In Lozells School, we put a huge emphasis on our children having the intrinsic motivation to learn. It is important that we foster a culture that encourages a love for learning and this is done through an engaging curriculum design. The children are encouraged to investigate their ideas.

3. MEETING THE AIMS OF THE NATIONAL CURRICULUM

A HIGH-QUALITY SCIENCE CURRICULUM SHOULD INCLUDE BOTH THE 'METHODS OF SCIENCE' AND THE ACQUISITION OF 'KNOWLEDGE AND UNDERSTANDING' OF 'FACTS AND PRINCIPLES', AND SHOULD BE 'BROAD AND BALANCED'.

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. They should be encouraged to be curious and ask questions about what they notice. They should be helped to develop their understanding of scientific ideas by using 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. They should 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. Most of the learning about science should be done through the use of first-hand practical experiences, but there should also be some use of appropriate secondary sources, such as books, photographs and videos.

Pupils should read and spell scientific vocabulary at a level consistent with their increasing word-reading and spelling knowledge at key stage 1.

Working Scientifically

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- 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

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 should 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. 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. They should draw simple conclusions and use some scientific language, first, to talk about and, later, to write about what they have found out.

Pupils should read and spell scientific vocabulary correctly and with confidence, using their growing word-reading and spelling knowledge.

Working Scientifically

During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- Asking relevant questions and using different types of scientific enquiries to answer them
- Setting up simple practical enquiries, comparative and fair tests
- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- Identifying differences, similarities or changes related to simple scientific ideas and processes
- Using straightforward scientific evidence to answer questions or to support their findings.

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. They 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. At upper key stage 2, they should encounter more abstract ideas and begin to recognise how these ideas help them to understand and predict how the world operates. They should also begin to recognise that scientific ideas change and develop over time. They should 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. Pupils should draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings.

Pupils should read, spell and pronounce scientific vocabulary correctly.

Working Scientifically

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- Using test results to make predictions to set up further comparative and fair tests
- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations
- Identifying scientific evidence that has been used to support or refute ideas or arguments

4. INTENDED PROGRESSION THROUGH THE CURRICULUM

EYFS | KEY STAGE 1 | KEY STAGE 2

	EYFS Understanding the world	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Biology	The Natural World Explore the natural world around them, making observations and drawing pictures of animals and plants Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter		Living things and their habitats *(+ revisit modules)*		Living things and their habitats	Living things and their habitats	Living things and their habitats
		Plants	Plants	Plants			
		Animals, including humans *(+ revisit modules)*	Animals, including humans *(+ revisit modules)*	Animals, including humans	Animals, including humans	Animals, including humans	Animals, including humans
							Evolution and inheritance
Physics		Seasonal changes *(+ revisit module)*		Light			Light
				Forces and magnets		Forces	
					Electricity		Electricity
					Sound		
						Earth and space	
Chemistry		Everyday materials	Use of everyday materials			Properties and change of materials	
				Rocks *(+ revisit module)*			
					States of matter		

EYFS | KEY STAGE 1 | KEY STAGE 2

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Skills	Ask simple questions and recognise that they can be answered in different ways (Year 1 focus) Use simple equipment top observe closely (Year 1 focus) Perform simple tests (Year 1 focus) Identify and classify (Year 1 focus) Use his/her observations and ideas to suggest answers to questions (Year 1 focus) Gather and record data to help in answering questions (Year 1 focus)	Ask simple questions and recognise that they can be answered in different ways including use of scientific language from the national curriculum (Year 2 focus) Use simple equipment to observe closely including changes over time (Year 2 focus) Perform simple comparative tests (Year 2 focus) Identify, group and classify (Year 2 focus) Use his/her observations and ideas to suggest answers to questions noticing similarities, differences and patterns (Year 2 focus) Gather and record data to help in answering questions including from secondary sources of information (Year 2 focus)	Ask relevant questions and use different types of scientific enquiries to answer them (Year 3 focus) Set up simple practical enquiries, comparative and fair tests (Year 3 focus) Make systematic and careful observations using equipment where appropriate(Year 3 focus) Gather, record, classify and present data in a variety of ways (Year 3 focus) Record findings using simple scientific language presented in different ways (Year 3 focus) Report on findings from enquiries, including oral and written explanations displays or presentations of results and conclusions (Year 3 focus) Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions (Year 3 focus) Identify differences, similarities or changes related to simple scientific ideas and processes (Year 3 focus) Use straightforward scientific evidence to answer questions or to support his/her findings (Year 3 focus)	Ask relevant questions and use an understanding of different types of scientific enquiries to best answer them (Year 4 focus) Set up simple practical enquiries, comparative and fair tests (Year 4 focus) Make systematic and careful observations and where appropriate, take accurate measurements using standard units, using a range of equipment including thermometers and data loggers (Year 4 focus) Gather, record, classify and present data in a variety of ways to help in answering questions (Year 4 focus) Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables (Year 4 focus) Report on findings from enquiries, including oral and written explanations displays or presentations of results and conclusions (Year 4 focus) Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions (Year 4 focus) Identify differences, similarities or changes related to simple scientific ideas and processes (Year 4 focus) Use straightforward scientific evidence to answer questions or to support his/her findings (Year 4 focus)	Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary (Year 5 focus) Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate (Year 5 focus) Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs (Year 5 focus) Use test results to make predictions to set up further comparative and fair tests (year 5 focus) Report and present findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations (Year 5 focus) Identify scientific evidence that has been used to support or refute ideas or arguments (Year 5 focus)	Plan different types of scientific enquiries to answer their own or others' questions, including recognising and controlling variables where necessary (Year 6 focus) Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate (Year 6 focus) Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs (Year 6 focus) Use test results to make predictions to set up further comparative and fair tests (year 6 focus) Use test results to make predictions to set up further comparative and fair tests (year 6 focus) Report and present findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations (Year 6 focus) Identify scientific evidence that has been used to support or refute ideas or arguments (Year 6 focus)

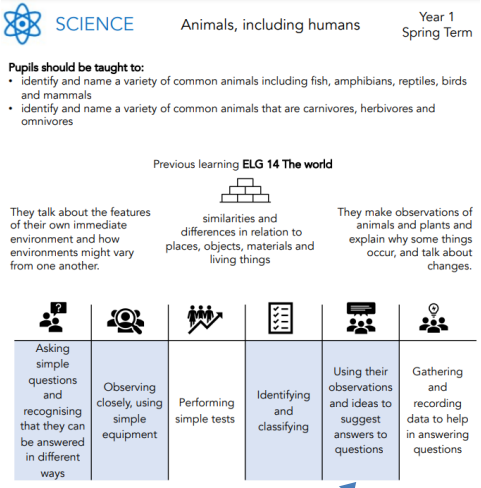
	EYFS	KEY STAGE 1		KEY STAGE 2		
Knowledge	Children are taught to: Plants -identify and name a variety of common wild and garden plants, including deciduous and evergreen trees -identify and describe the basic structure of a variety of common flowering plants, including trees. Animals, including humans - identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals - identify and name a variety of common animals that are carnivores, herbivores and omnivores - describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) - identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Everyday Materials -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. Seasonal Change -observe changes across the four seasons	Children are taught to: Living things and their habitats -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. Plants -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. Animals, including humans - 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. Uses of everyday materials - identify and compare the suitability of a variety of everyday materials, including wood, metal,	Children are taught to: Plants - identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers - explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant - investigate the way in which water is transported within plants - explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. Animals, including humans - 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. Rocks - compare and group together different kinds of rocks on the basis of their appearance and simple physical properties - describe in simple terms how fossils are formed when things that have lived are trapped within rock - recognise that soils are made from rocks and organic matter. Light - 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 change.	Children are taught to: Living things and their habitats - 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. Animals, including humans - 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. States of matter - compare and group materials together, according to whether they are solids, liquids or gases - observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) - identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. Sound - 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.	Children are taught to: Living things and their habitats - 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. Animals, including humans - describe the changes as humans develop to old age. Properties and changes of materials - compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets - know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution - use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating - give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic - demonstrate that dissolving, mixing and changes of state are reversible changes - explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda. Earth and space - 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	Children are taught to: Living things and their habitats -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. Animals including humans -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. Evolution and inheritance - 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. Light - 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

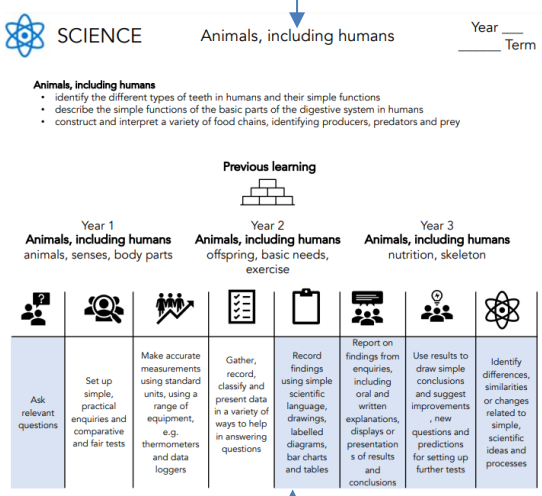
EYFS	KEY STAGE 1	KEY STAGE 2				
	- observe and describe weather associated with the seasons and how day length varies.	plastic, glass, brick, rock, paper and cardboard for particular uses - find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	<u>Forces and magnets</u> - 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.	<u>Electricity</u> - 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.	- use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. <u>Forces</u> - 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.	- use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. <u>Electricity</u> - 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.

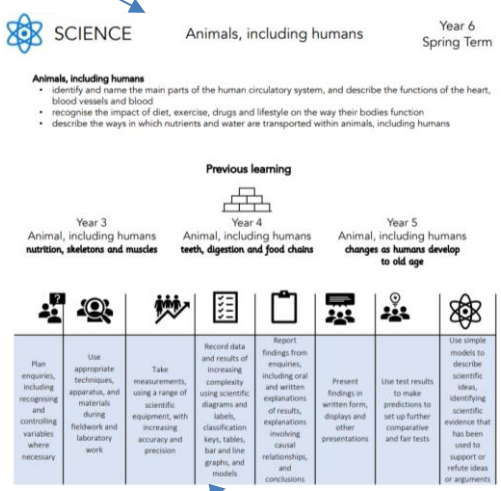
5. IMPLEMENTATION THROUGH CUSP – EVIDENCE-BASED PRACTICE

At Lozells Primary School, Science is taught using a modular approach, meaning the children are exposed to short modules of learning which are revisited across the year or throughout the key stage. Each module provides an in-depth insight into key scientific concepts whilst also encouraging the children to work scientifically and use technical vocabulary. Our curriculum is designed so that the carefully sequenced modules build upon the children's prior learning to ensure better cognition and retention of knowledge.

Each module identifies previous learning, including knowledge acquired in EYFS, and there is a clear progression of skills as we see in the overviews below for Years 1, 4 and 6.





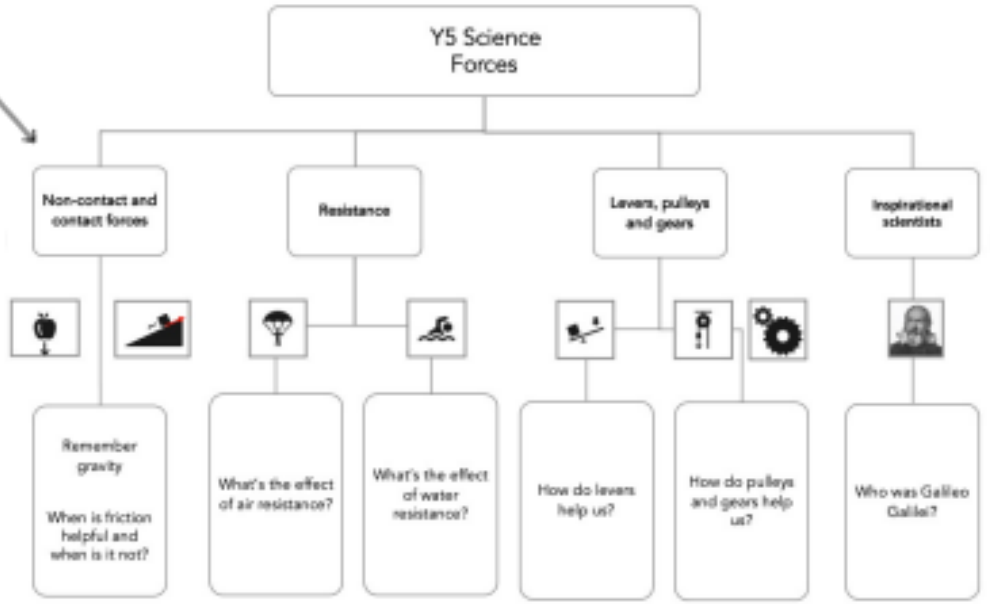


The modules encourage the children to work scientifically and are tailored to meet the progression of skills required throughout the key stages.

At the beginning of each module, we share the 'big idea' for each area of learning. This gives the children an overview of the module and identifies the sequence of learning.

Share the big ideas that you will be studying.

ZOOM OUT



ZOOM IN

Show how the specific content relates to the big ideas.

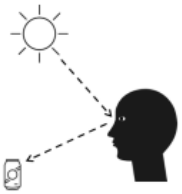
Show the stages of the study, one sequence at a time.

Cumulative quizzing is used throughout each unit to encourage better retention and to reinforce knowledge and understanding of new concepts. Quizzing is one way we revisit prior learning and make connections to new learning to ensure a better understanding and encourage children to

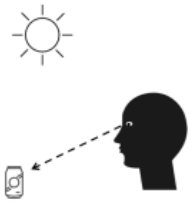
At the start of each module, pupils undertake a short quiz, using platforms such as Socrates, to establish prior knowledge and understanding of the module content. Throughout each module pupils continually revisit previous content to reinforce key knowledge and vocabulary. At the end of the module, pupils take another quiz to check their understanding and knowledge.Quizzing – explain and show examples

2. How we see? Which diagram is correct?

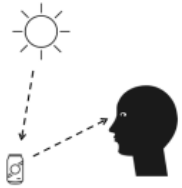
(A) Light comes from the sun and then reflects to an object.



(B) Light comes from our eyes

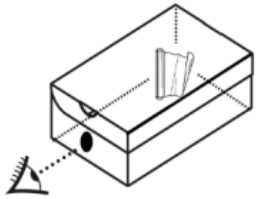


(C) Light reflects off an object and enters our eyes.



3. Why can't we see objects easily when they are placed in a box with very little light?
(CHOOSE 2)

(A) The darkness is pushing the light away.
(B) We need light to see objects.
(C) Shadows push the light out of the box.
(D) Darkness is the absence of light.

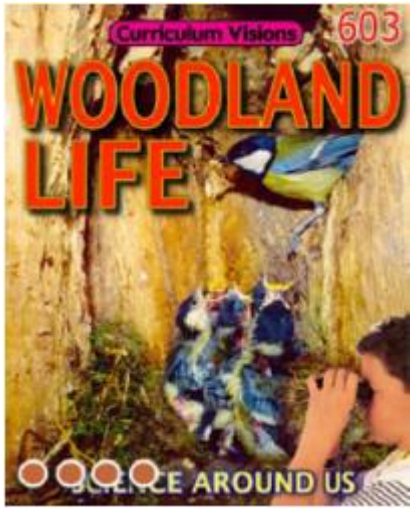


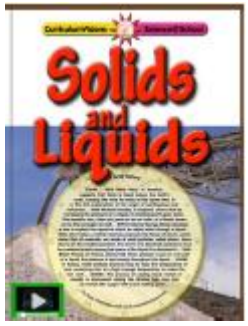
4. Shiny objects are light sources.

(T) True
(F) False

6. Developing English speaking, reading and writing skills through

At Lozells Primary School, Reading is at the heart of everything that we do and our vocabulary rich curriculum ensures children are exposed to Tier 2 and Tier 3 words in each module of learning. Key vocabulary is taught in every lesson with the expectation that children orally rehearse the use of these words to allow them use them in context and apply them into their independent work.





7. EQUALITY OF ACCESS AND EFFECTIVE SUPPORT FOR CHILDREN WITH SEND

Teachers are knowledgeable about current educational research and in particular Sweller's Cognitive load theory. Teachers understand that children with SEND related to cognition and learning may require support to hold new learning within their working memory and process new learning. Teachers understand how to adapt resources and teaching tools to support children with SEND. There is a continued focus on challenge and high aspirations for learners with SEND and teachers know that it is important to remove barriers children may have in demonstrating what they know and can do. We have very knowledgeable and 'expert' learners across many subjects who also benefit from support with their SEND needs.

Differentiation and scaffolding (Adaptive) teaching strategies can include:

- Knowledge notes can be edited and adjusted for pupils with SEND. Teachers can ensure that these contain the essential, most important information children need with key vocabulary and carefully chosen icons to support children's understanding.
- Identifying alternative ways of recording
- Adapting to meet learners' needs
- Targeting additional input to lower attaining pupils and those with SEND
- Differentiating questions
- Setting clear objectives so that each child can understand them
- Make sure work is presented in small, achievable steps
- Chunk Knowledge Notes into manageable sections •
- Highlight key vocabulary
- Annotation
- Verbally share knowledge and understanding
- Rehearse orally allowing pupils to formulate and practice responses before recording them

8. ANALYSING THE IMPACT OF OUR CURRICULUM TO INCLUDE ASSESSMENT

Pupil book studies are carried out once every term. These are evidence-led evaluation of long-term learning through precise and structured conversations with children.

Pupil Book Study aims to help subject leaders and school leaders answer these three questions:

1. **What impact is your CURRICULUM having**? What effect is the curriculum architecture having?

2. **Does teaching support LONG-TERM LEARNING?** Is the evidence-led practice really being deployed at a classroom level, or is it superficial?

3. **Do tasks enable pupils to THINK HARD and CREATE LONG-TERM MEMORY?** How impactful are tasks, and do they help pupils to think hard and generate learning?

Pupil book studies enable children to demonstrate what they have learnt and use new vocabulary associated with the topic being studied.