Science Subject Leadership: PSQM Gilt

Before PSQM | Evidence pre PSQM | Actions during PSQM | Impact PSQM | Next Steps

SL Aim: *Science subject leadership is strengthened and developed through:*

A. The creation and implementation of a clear vision for science

Impact: Clear visibility of the science vision, especially through displays, captured the attention of our pupils. It made science more engaging and relevant to their learning experiences. Pupils talk about it during lessons and discuss how the vision links to a particular activity or lesson in science.

Before: The current science policy is comprehensive, covering intention, implementation, and outcomes. Although it is well-documented on the website, its presence within the school, particularly in displays, is lacking. Additionally, the vision and principles of science have not been clearly communicated to both staff and students. There is a lack of examples demonstrating the vision in practice, making it challenging for staff and students to understand.

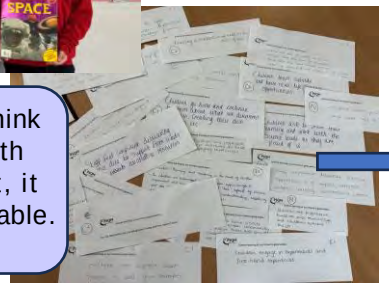
What is your vision for the science curriculum?

PSQM Spotlight
Ed Walsh, SRHL

Action: Science leads watched video:

Action: To address lack of clear vision, science leads organised a staff meeting to discuss the science vision, encouraging staff members to articulate their perspectives on what the vision of science at Egerton Primary School should entail.

Action: New appointed Science ambassadors



When our teachers let us think for ourselves, come up with ideas, and figure things out, it makes us feel smart and capable.
Year 6 pupil

Science Vision at Egerton Primary School...

In our primary school, "SCIENCE IS" is the guiding principle that shapes our curriculum, teaching methods, and the way we nurture young minds to become scientifically literate, inquisitive, and responsible global citizens.

S
- **Scientists and Careers:** We provide children with opportunities to interact with real-world scientists, learn about their work, and explore various career paths.

C
- **Curiosity Ignited:** We ignite the spark for passion, that drives children to question, explore, and seek answers to the wonders around them.

I
- **Inclusive Education:** We ensure inclusivity by tailoring lessons to different learning styles and abilities, making science accessible and engaging to all.

E
- **Enquiries:** Children explore a range of enquiries to foster a deeper understanding of scientific phenomena inside and outside the classroom.

N
- **Natural Connections:** Recognising the intricate web that links all branches of science, emphasising that biology, chemistry, physics, and more are interdependent.

C
- **Critical Thinking:** Empowering children with the ability to analyse, evaluate, and make informed decisions based on evidence, a cornerstone of scientific enquiry.

E
- **Enrichment:** Wider opportunities for children to participate in science-related activities beyond the classroom, including field trips and guest speakers.

I
- **Innovation:** We encourage creative thinking and problem-solving, cultivating a spirit of ingenuity and a willingness to explore new frontiers in science.

S
- **Sustainability:** We teach our children about the delicate balance of ecosystems, inspiring a commitment to sustainable practices for the betterment of our planet.

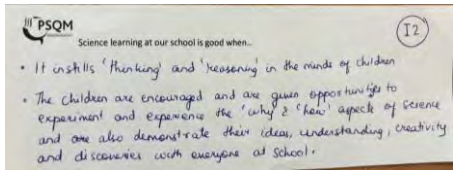
Action: Science lead conducted whole school science voice: Science is good when... this has been used to feed into the vision and principles.

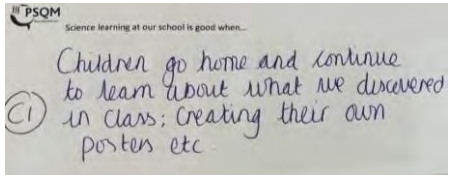
Next Step: Review principles, based on staff and pupil feedback/voice and monitoring of planning.

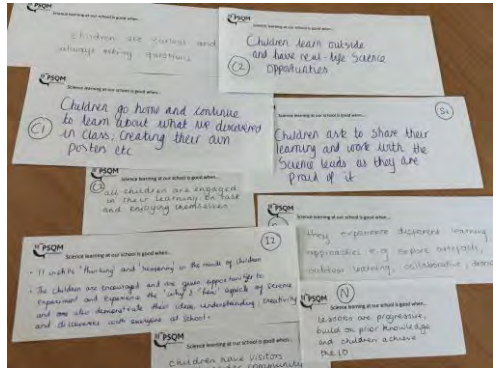
Action: Science Ambassadors working on our science principles.

Action: The vision and principles have been shared on our website and included in our newsletter for parents and the wider community to see.

A well - defined science vision serves as a beacon for continuous improvement. It allows us to evaluate our current practices against our desired outcomes, identifying areas for growth and innovation. Through regular review and refinement of our vision, we can adapt to the evolving needs of our learners. Our aim is so our science vision inspires and motivates both staff and children. By articulating our aspirations and values regarding science education, we can ignite passion and curiosity for the subject, fostering a culture of enquiry and exploration.
Science Lead







Science Subject Leadership: PSQM Gilt

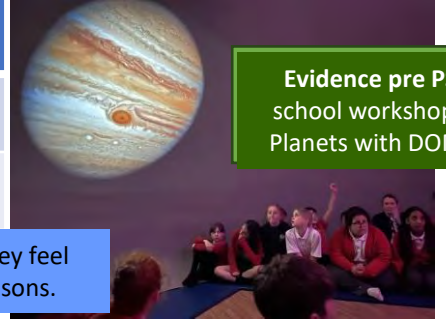
SL Aim: *Science subject leadership is strengthened and developed through:*

A. Science vision and principles in action within the school.

Action: Year 6 workshop with STEM Ambassador, Tom, who is teaching the children how to program and fly indoor drones.

Impact: As the children worked collaboratively to create the vision they feel included in their learning and are more enthusiastic about Science lessons.

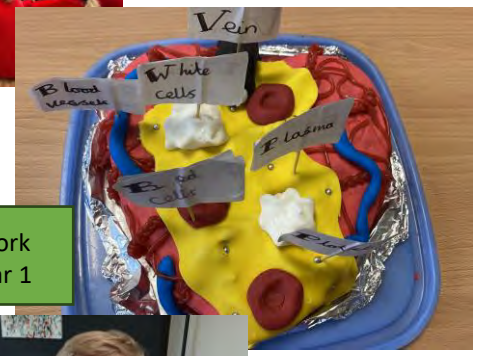
Evidence pre PSQM: Author JD Welch visit and assembly.

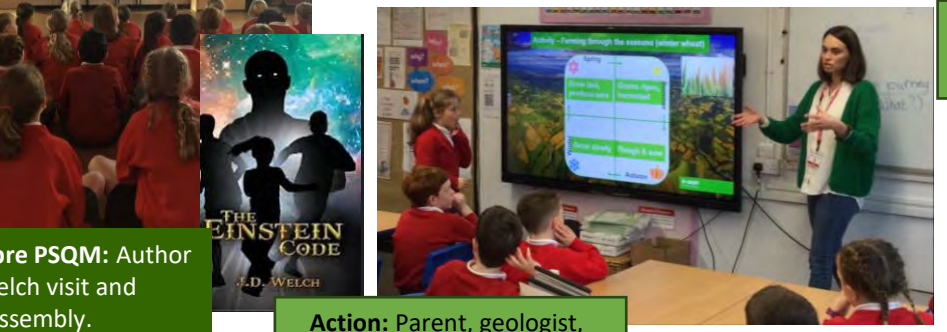


Evidence pre PSQM: Whole school workshop on Stars and Planets with DOME EXPLORES.

Impact: Interactions with guest speakers provided real-world applications of scientific concepts. Pupils enthusiastically complete optional homework activities related to Science.

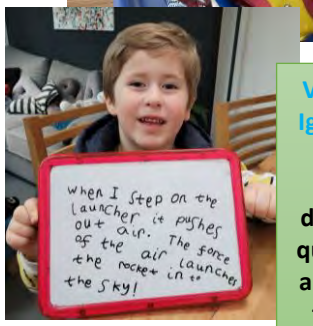
VISION: Enrichment: Wider opportunities for children to participate in science-related activities beyond the classroom, including field trips and guest speakers.



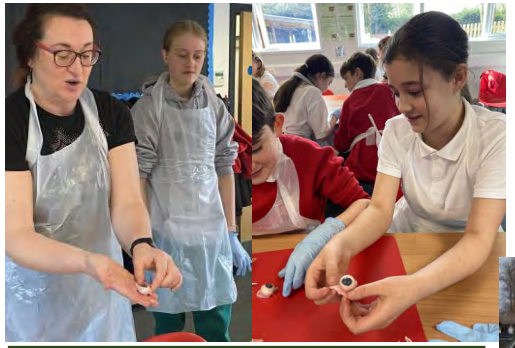


Action: Parent, geologist, workshop for Year 3 pupils

Action: Creative homework projects – Year 6 and Year 1



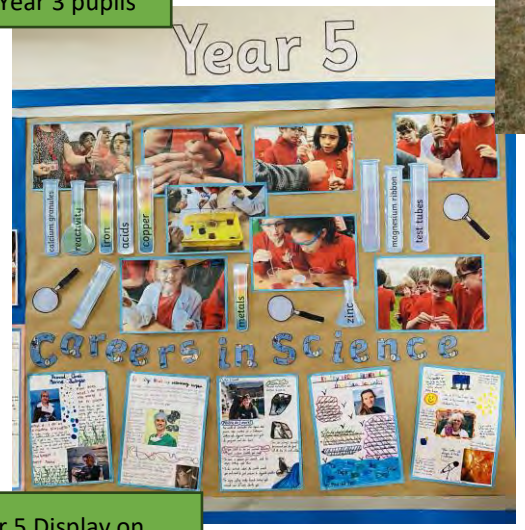
VISION: Curiosity Ignited: We ignite the spark for passion, that drives children to question, explore, and seek answers to the wonders around them.



Action: Secondary school Science teacher demonstrated an eye dissection to Year 6

VISION: Scientists and Careers: We provide children with opportunities to interact with real-world scientists, learn about their work, and explore various career paths.

Evidence pre PSQM: : STEM Career Day – staff and children dressed up



Action: Year 5 Display on Careers in Science

Vision

Impact: Children have the opportunity to develop their communication skills by asking questions and actively participating in discussions with guest speakers. This helps them to articulate scientific ideas.

Next Step: Review principles, based on staff and pupil feedback/voice and monitoring of planning.

Science Subject Leadership: PSQM Gilt

SL Aim: *Science subject leadership is strengthened and developed through:*

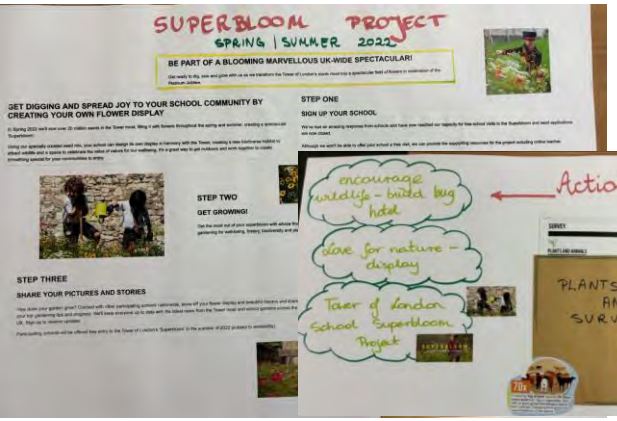
A. Science vision and principles in action within the school. SL A

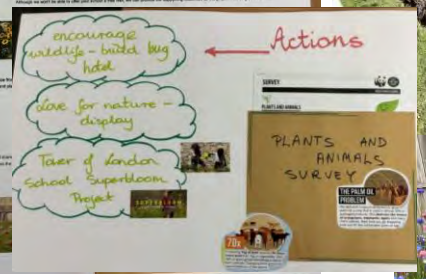
Before: Staff engaged in sustainability-related activities; however, these activities lacked a sequential structure and connection to Sustainable Development Goals. The selection of PLANT units did not prioritise the most impactful contributions to learning and the school environment.

Action: Year 2 children planting bulbs around the school

Action: A structured plan and sequence have been developed for the delivery of lessons on PLANTS for each class

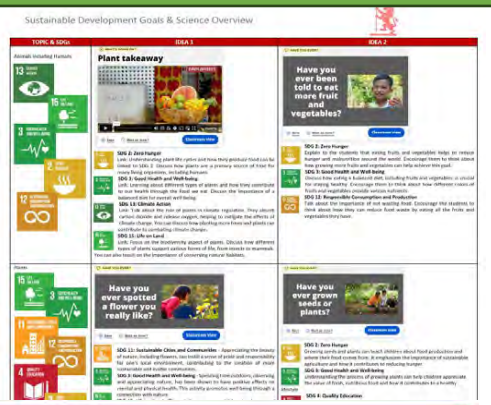
Year 2	• End of October (before half term) Plant bulbs (**tulips and daffodils, snowdrops and crocuses**). In front of the school, around the fence. MS to support EARLY POLLINATORS FRIENDLY FLOWERS	• End of March (MS to support or plant with the children). Before Easter break. Plant **meadow mix** seeds; prepare extra bed with the children (group at a time). Classify different meadow seeds. As the plants grow, observe and match the seeds to the adult plant.	• April, after Easter holidays Plant vegetables so children can grow and harvest in June/July: **lettuce different varieties** (sow in container in the greenhouse, replant outdoor to a bigger container by end of May)
			
	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. **Living things and their habitats** • Identify and name a variety of plants and animals in their habitats, including microhabitats.		
	1. Year 2 pupils should grow a range of bulbs and seeds, not just one type. It is recommended that these are predominantly grown in beds outside, although they may be started in the classroom or a greenhouse and then be replanted in the ground. If growing space in the school is limited, Year 2 should have priority for growing plants in the space available. 2. Growing plants needs to be planned carefully as bulbs and seeds need to be planted at specific times of the year. Generally, bulbs will need to be planted in the autumn term and seeds in the spring term. When deciding what to grow, it is important to think not only about the diversity of plants but also the time when the plants will reach maturity. There is nothing more disappointing than pupils coming back in September to find dead tomato plants. 3. Where possible, pupils should be responsible for deciding what to plant and researching how and when to plant it. They can look at the seed/bulb packets and decide which need to be planted in full or partial sunlight, at the front or back of the bed (according to their height), and how to space them. They will then need to tend and nurture their plants for them to reach maturity.		



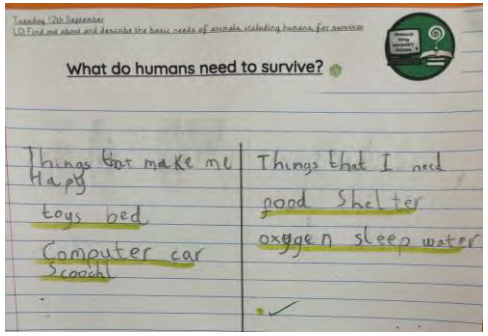


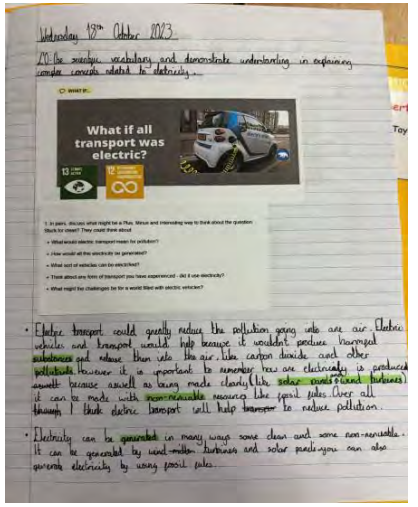
Explorify

Action: Each year group has integrated Sustainable Development Goals into their curriculum, aligning them with relevant Science units and utilizing Explorify resources.



Action: Pupils use SDGs and Explorify resources when learning about sustainability

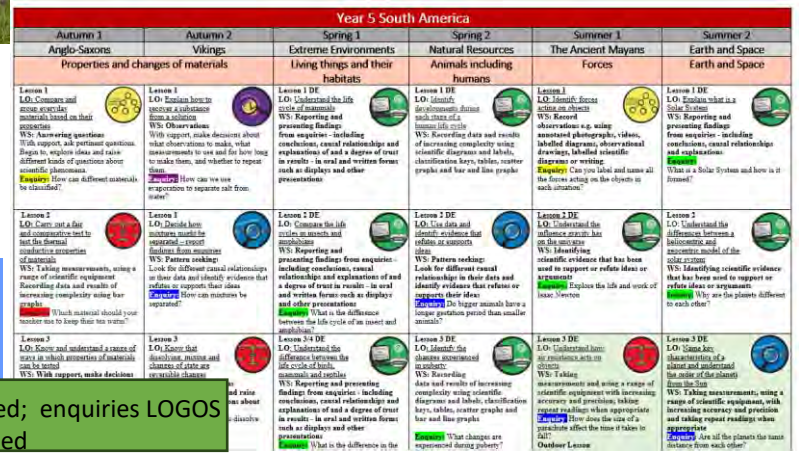




VISION: Sustainability: We teach our children about the delicate balance of ecosystems, inspiring a commitment to sustainable practices for the betterment of our planet.

Evidence pre PSQM: Pupils from Eco Ambassador group took part in a project together with The Tower of London – Superbloom. They created a meadow at the back of the school field to support biodiversity.

Impact: Linking science to SDGs encourages pupils to actively participate in addressing global challenges. It instils a sense of agency, empowering them to contribute positively to the world. Pupil Voice



Action: MTP developed; enquiries LOGOS added

VISION: Enquiries: Children explore a range of enquiries to foster a deeper understanding of scientific phenomena inside and outside the classroom.

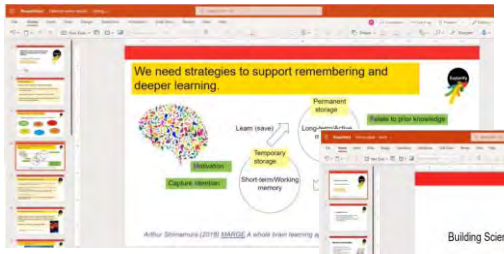
Science Subject Leadership: PSQM Gilt

SL Aim: *Science subject leadership is strengthened and developed through:*

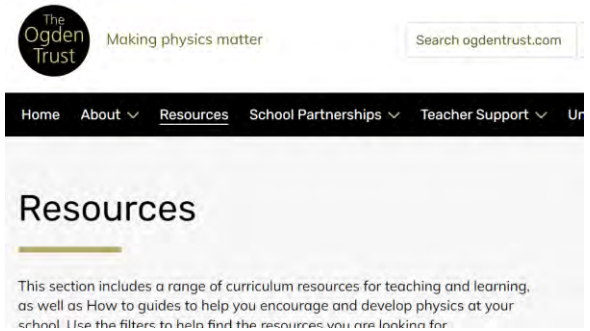
B. Strategic support enabling improvement to take place SL B

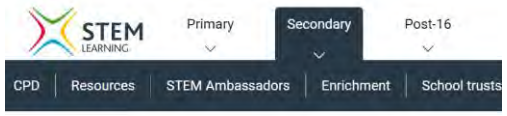
Before: The Science Lead has not been involved in any CPD training until a few years ago and is not part of any local science networks. The strategic development of science became a priority from 2020.

Before: No specific CPD on moderation was access by SL and the staff. Moderation of science work did not take place before PSQM journey.



Action: Science leaders have engaged with a huge array of professional development opportunities in the last 3 years.



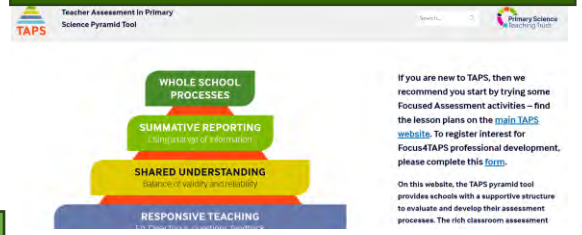


Evidence pre PSQM: Science Lead registered on STEM ambassador program

Action: Science leader took part in various webinars/training on the PSQM repository

Impact: Exposure to diverse webinars and information sources contributes to continuous professional development. The subject leaders stay informed about current trends, best practices, and emerging research in the field of science education.

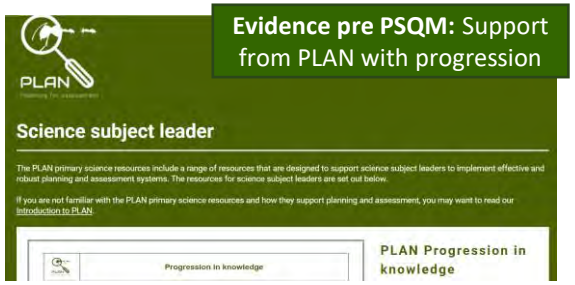
Evidence pre PSQM: Use of TAPS pyramid to support teachers in assessment



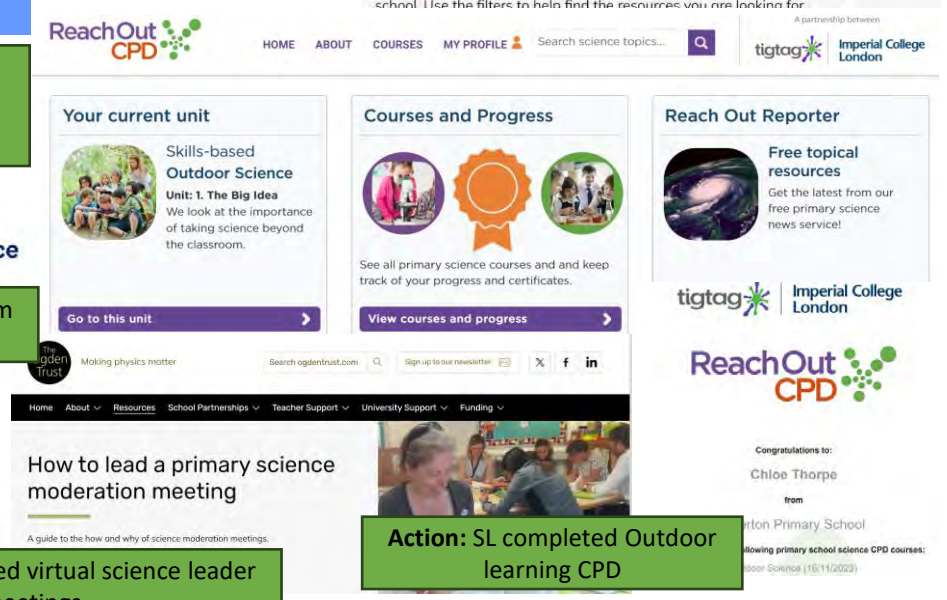
Impact: Teachers are better equipped to design assessments that align with learning objectives, providing more accurate and meaningful insights into pupils' understanding of scientific concepts.

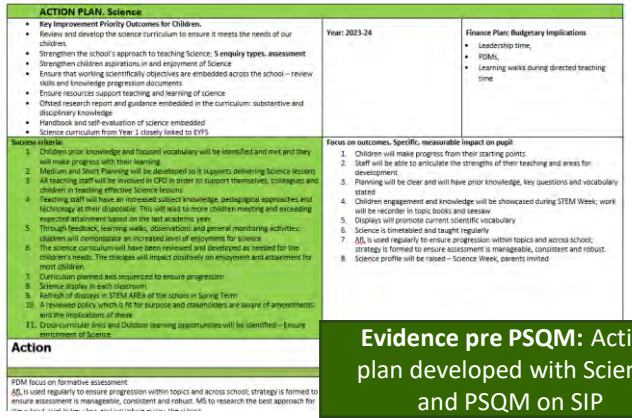
Action: Subject Lead read the document for support with planning Inset and staff meetings

Evidence pre PSQM: Support from PLAN with progression



Action: Subject Lead utilise information from Ogden Trust during moderation sessions

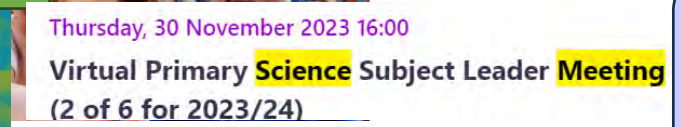




Evidence pre PSQM: Action plan developed with Science and PSQM on SIP

Action: Science Lead visited different websites to support planning with SDGs

Action: SL attended virtual science leader meetings



Action: SL completed Outdoor learning CPD

Next Step: To continue attending virtual science subject leader meetings and trust cluster group.

I have gained a wealth of knowledge and expertise and I feel confident in supporting the staff to develop Science further. The headteacher provided huge financial support, purchasing memberships, resources and funding CDPs as well as aligning SIP and PSQM priorities. This helped me to lead science in a very effective way. **Subject Lead**

Science Subject Leadership: PSQM Gilt

SL Aim: *Science subject leadership is strengthened and developed through:*

C. An effective monitoring and improvement cycle that informs development in science

Egerton Primary School, Science Monitoring, 2023/24

Book "LOOK"		
Year 5, Properties and changes of materials, Autumn I, 21.10.23		
Questions	Notes	Actions
Evidence of scientific enquiries: Is there evidence of wide range of learning experiences? Different types of enquiry and outdoor learning?	Different types of enquiries in books: Fair test – investigating how absorbent different brands of kitchen roll are. Compare and group – test the physical properties of the following materials: iron, jelly, wood – 30.09.21. Comparative test – Which type of material is best for keeping tea warm?	Update skills progression by theme document as the Fair test, investigating how absorbent different brands of kitchen roll are, is not one of the enquiries. Consider outdoor learning, treasure hunt outside looking for different materials, spot rusting, decaying around the school
Activities: Are the activities enabling pupils to embed/understand new knowledge? And recall prior learning?	Lessons are sequenced so children can use their prior knowledge when answering questions in their books. Firstly, children focused on vocabulary, both, prior and new. Then they compared and grouped materials. After that, they focused on comparative and fair testing. During next half term, children will study dissolving, separating different materials, reversible and irreversible changes. Enquiries enable children to use prior and new vocabulary	Consider using Concept Cartoon. They are designed to provoke discussion and stimulate thinking. https://edu.rsc.org/resources/science-concept-cartoons-rusting/1881.article This website is for free and has some good resources
Clarity of presentation: Labels/diagrams/charts/tables/recorded independently/worksheets used	Some worksheet used (tables with subheadings) to support children's presentation skills. Work recorded independently. Presentation is neat and clear. Children collect results in tables clearly labelled	

Book "LOOK"		
Animals Including humans – Year 3, Autumn I, 21.10.23		
Questions	Notes	Actions
Evidence of scientific enquiries: Is there evidence of wide range of learning experiences? Different types of enquiry and outdoor learning?	Different types of enquiries evident in books: Comparative and fair testing: How does the skull of a boy compare to girl? Link to pattern seeking. Identifying and Classifying: How would you organise these foods into the different nutrient types? Pattern seeking: Do male humans have larger skulls than females? Link to comparative testing. Research: Why do vitamins keep us healthy and which foods can we find them in?	Consider outdoor learning – stick skeleton
Activities: Are the activities enabling pupils to embed/understand new knowledge?	Activities planned so the children can embed prior knowledge and understand new knowledge. Firstly, children concentrated on identifying 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. After that, they identify that humans and some other animals have skeletons and muscles for support, protection and movement. Children explored ideas about what would happen if humans did not have skeletons using concept cartoon. Children explore that some animals don't have skeletons using odd one out	Consider different enquiries for example: Identifying and grouping animals with and without skeletons. This enquiry will support children's understanding that there are animals without a skeleton. Which animals does the skeleton belong to? This could be another activity to consider. It will help children see the different

Evidence pre PSQM: Book Look in Autumn 1.Staff received feedback. Monitoring – book look, PV and SV – every term to capture impact

Egerton Primary School, Subject Monitoring, 2023-24

MONITORING - Quality Education – 5-a-day Science

Short in class (at start: Input and In Focus task and end workbooks, self-assess point)
- Activating and building on prior learning: teacher subject knowledge and retrieval practice
- Mathematical Vocabulary
- Questioning/feedback from teacher, addressing misconceptions
- Scaffolding support by TA, concrete, pictorial, abstract – CPA
- Pitch and Challenge: What evidence is there for high expectations and learning being challenging enough?
- Assessment: Are a range of assessment types used? (peer assessment, self-directed assessment, teacher-led assessment, peer assessment)

Book Look

Depth and breadth of coverage
- Do children learn a suitably broad range of concepts/topics within Maths?
- How many times are they journaling a week?
- Is the best sections of learning to journal being chosen?
- Do variety of different journaling styles being used?

Clarity of presentation
- How are the children presenting their work?
- Are labels/diagrams/charts/tables/recorded independently/worksheets used?

Assessment/Feedback/Marking
- Does the pupil receive feedback on their work?

Pupil Voice
- What are you learning about in Science? (L/O) Why are you learning this? Have you studied this before?
- What have you learnt in Science last year?
- How often do you have a science lesson?
- Do you work on your own or in groups in science?
- What do you like about science? What has been your favourite part of science this year?

Scrutiny carried out by

Rationale

Date

NOW

Summary Whole School Strengths

Summary of Whole School Areas for Development

Action: Monitoring summary documents developed and shared with SLT during termly meetings.

"It's incredibly valuable to have meetings with the SL. They provide us with a deeper understanding of the school's strategic direction and help us ensure that our governance decisions are well-informed and aligned with the needs of the children."
Governor Voice

1. OVERALL PICTURE OF CURRENT PRACTISE – Quality of Education

Evidence pre PSQM: Report shared with governors.

Impact: Science lead has a good understanding of children's views and opinions of science. Which has enabled several changes to be implemented based on pupil voice data such us implementation of new science books. SL met with governors each term to discuss the action plan, curriculum development, assessment. This fostered collaborative approach to the development of science This enhances governance oversight and decision-making, as governors are more informed about key educational initiatives and priorities.

Egerton Primary School, Subject Monitoring

Year Group: 5 — Teacher: Mrs Sumser/Mrs Levinsohn

Subject: Science — Term: Spring Term

Pupil Talk	
Questions	Notes
How often do you have a science lesson?	At least once or twice a week.
What is Science? What is a Scientist?	Is a chance to learn something new and can be used in many jobs. Used to make things – building a house – need to think about materials. Building up your scientific knowledge. David Attenborough – animals and life when he was younger – one of his achievements was he got knighted by the Queen. Stephanie Kwolek – her invention of Kevlar – strong metal – can re-call facts rapidly.
What do you like about science?	Max – Learn new things. Callum – experiments and learn how things are made. Lola – experiments. Freya – experiments. Imogen – Enjoy combining subjects in science – made a comic strip of the inside of a flower.
What are you learning about in science?	Natural Resources – debated whether was Geography... Materials – what dissolves in water. Life Cycles of different animals. Sexual and asexual reproduction of plants. Dissecting a daffodil. Comparing life cycles.
	Imogen – Experiments with metals and acids.
What do you find challenging in science? Is there anything that you do not like?	Predictions can be tricky – not knowing much about... Vocabulary for an experiment
How could your teacher/school improve science?	Go outside for more lessons.
Do you work on your own or in groups in science?	Bit of both – posters in small groups. Investigations and enquiries in small groups or with...
Enquiries	Discussed the five enquiries. Linked basil experiment to observing over time.
What do you think you learn from carrying out an experiment? Can you give me an example of an experiment that you've done recently?	To learn new things. Enjoyment and interesting. Help us to remember things and explain our hypothesis. Using skills to gather information and research different things
The following questions are about connecting scientific learning to the real world: If you were to invent something, what would it be? Where does [e.g. electricity] come from? How can science help people?	Doctors – make medicines/injections. Archaeologist – animals, rocks, fossils. Architects – building, measuring, materials. Ecologists – environments, plants. Gardener – plants. Zoologist – need to have knowledge of life cycles. Vets – know about animals, medicines

Action: Pupil Voice Spring Term. Children were able to talk about what they like about science and what they learnt

Next Step: Continue with regular monitoring activities feeding back to staff and governors

ACTION PLAN. Science

Key Improvement Priority Outcomes for Children: Review and develop the science curriculum to ensure it meets the needs of our children. Strengthen the school's approach to teaching Science; 5 enquiry types, assessment. Strengthen children aspirations in and enjoyment of Science. Ensure that working scientifically objectives are embedded across the school – review skills and knowledge progression documents. Ensure resources support teaching and learning of science. Ofsted research report and guidance embedded in the curriculum; substantive and disciplinary knowledge. Handbook and self-evaluation of science embedded. Science curriculum from Year 1 closely linked to EYFS

Year: 2023-24

Finance Plan; Budgetary Implications: Leadership time, PDMs, Learning walks during directed teaching time

Action: Action plan shared with SLT and the new headteacher and included in SIP 2023-24

Impact: *What will the outcomes be?* — Evidenced by/ through — Evaluation *Have the intended outcomes been achieved?*

Children will make progress from their starting points. — 1. Book Look 2. Deep Dive 3. Learning Walks

Before: Initially, during the inception of the PSQM cycle, the monitoring framework was established, incorporating book examinations, pupil feedback, and staff input. Throughout subsequent terms, subject reviews have been consistently conducted by the Subject Leader (SL), with feedback disseminated during staff meetings. Regular monitoring of planning across the school ensures ongoing quality assurance. Staff members are well-informed about both strengths and areas requiring improvement. However, due to changes within the governing body, newly appointed governors possess limited understanding of the advancements in science and their related responsibilities. New headteacher appointed from September 2023.

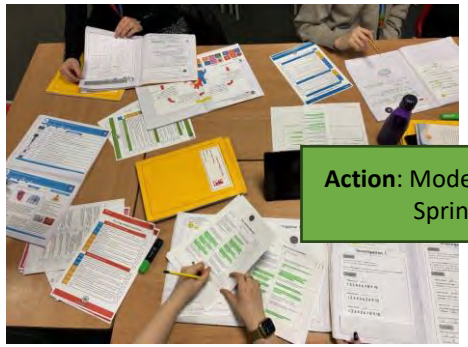
We love it when our teachers show us how science is all around us, in everyday things. It helps us understand why science matters in our lives.
Year 4 pupil

Science Teaching: PSQM Gilt

T Aim: *Science teaching is strengthened and developed through:*

A. Staff Engagement with professional development is regular and ongoing

Before: Over the past three years, there have been scheduled opportunities for staff CPD each term. During this time, staff have actively participated in and implemented various actions, including different types of enquiries, formative assessment strategies, summative assessment strategies, and retrieval practice, among others. While these initiatives have been introduced, there remains a need to revisit them to ensure they are fully integrated into our practices and that every staff member feels completely confident in implementing them. This necessity arises from monitoring processes and feedback from staff, indicating that additional support is still required for some staff.



Action: Moderation meeting Spring Term

Animals including

Climate challenge

Electricity for age

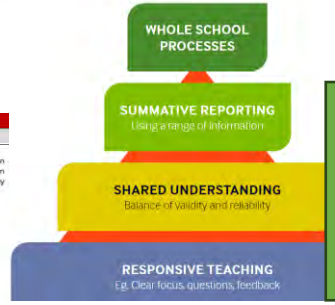
Evolution & inheritance for ages 7-11

Forces for ages 7-11

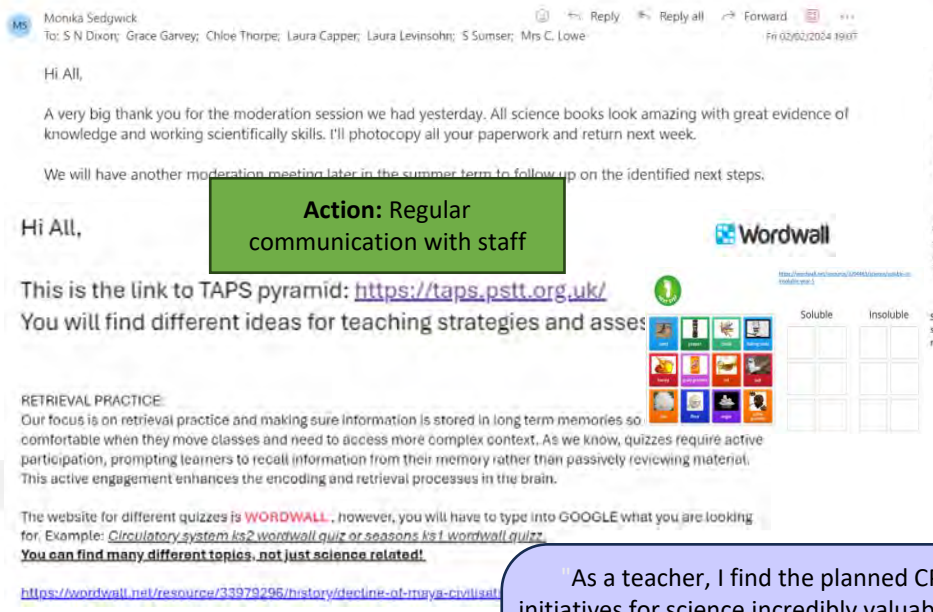
Human body f

Human body f

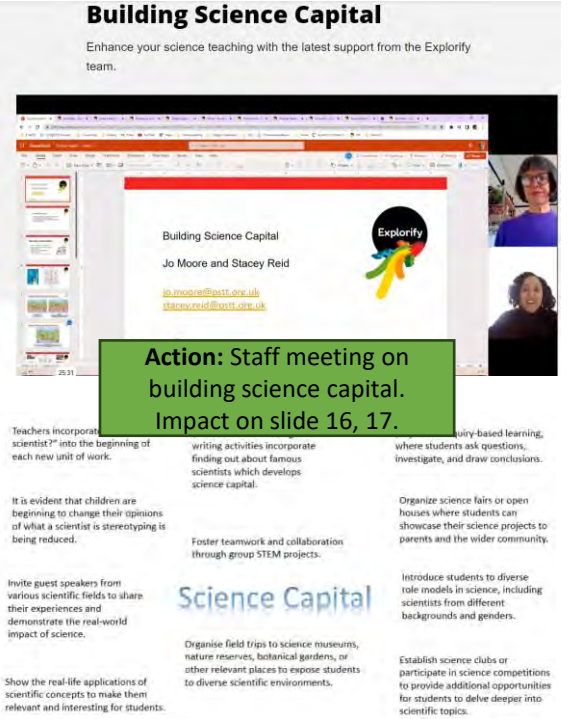
Action: Based on staff voice - Time dedicated during staff meetings, staff guided to watch videos to enhance subject knowledge



Action: Revisited - Staff CPD around assessment using TAPS; this involved peer-to-peer learning sessions to deepen understanding and implementation of effective assessment practices during science lessons. Impact slide 14, 15.



Action: Regular communication with staff



Action: Staff meeting on building science capital. Impact on slide 16, 17.

Action: Staff meeting for sequencing Plants unit and the use of school grounds. Impact slide 11

Action: SL shared EEF report. Staff engaged with EEF report and the summary of recommendations

"As a teacher, I find the planned CPD initiatives for science incredibly valuable and empowering. The regular updates and meetings provide us with dedicated time to collaborate, learn, and reflect on our teaching practices. I use the Explorify planning support videos on a regular basis.
KS2 Teacher

Impact: Teachers have a solid understanding of the content they are teaching, enabling them to deliver accurate and up-to-date information to their pupils. Through shared experiences and collaboration, staff is able to exchange ideas and discuss activities. Through regular communication, formal (staff meetings, emails), informal chats, SL has a good understanding of the impact of CPDs and is able to act in a timely fashion to address anything that comes up.

Science Wider Opportunities: PSQM Gilt

T Aim: *Science teaching is strengthened and developed through:*

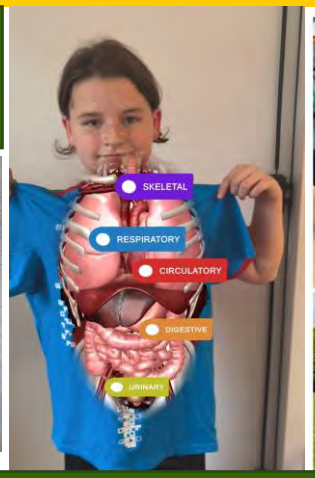
B. Use of a range of effective teaching and learning strategies

Before: Over the past three years, staff have developed and embedded various teaching strategies in science, ensuring that pupils are exposed to a diverse range of instructional approaches tailored to their individual learning needs and preferences. Feedback from pupils, parents and staff confirmed a deeper learning experiences - use of higher order thinking, vocabulary and questioning.

I absolutely love our science lessons, especially when we get to do practical activities and build models! Building periscopes was so cool! I got to work with my friends to assemble the parts and see how light reflects off mirrors. We even took our periscopes outside on the field to practice and see if they work. It was amazing to see how we could use them to look around corners and spy on each other! **KS2 Pupil**

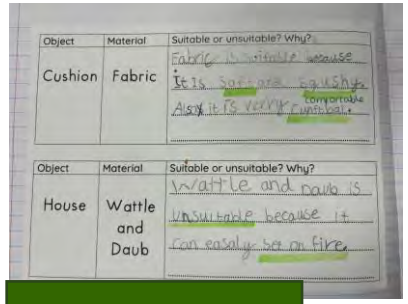
Evidence pre PSQM: Classification in Year 6

Evidence pre PSQM: Children in Year 6 using T-shirt and an app – Curios to learn about the circulatory system



Evidence pre PSQM: Model building in Year 6

As the subject leader, I am pleased to observe the diverse range of teaching and learning strategies being utilised within our classrooms. The implementation of varied approaches is essential to cater to the diverse learning styles, ensuring that each child has the opportunity to engage effectively with the curriculum. By incorporating a mix of instructional methods, such as practical investigations, play base learning activities, group discussions, we are able to accommodate different learning needs and promote deeper understanding and retention of concepts. **Subject Lead**



Evidence pre PSQM: Prediction in Year 1

Evidence pre PSQM: Year 3 display on plants with vocabulary

Evidence pre PSQM: Dissection of a plant in Year 5

@ExplorifySchool #HYE22 Year 6 have been looking into Have you ever found mould growing on bread at home. We mind map our information and watch few videos to deepen our understanding. @EgertonPrimary

15:36 · 17/10/2022 From Earth

Science Teaching: PSQM Gilt

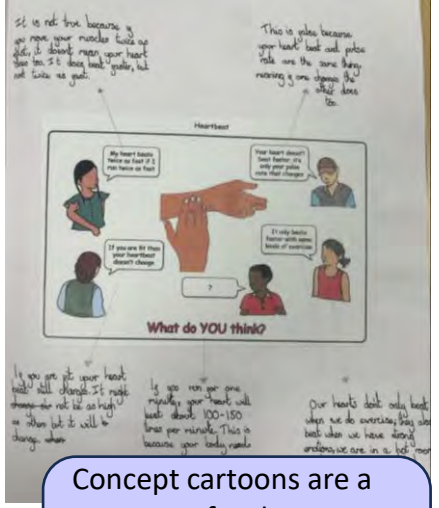
T Aim: *Science teaching is strengthened and developed through:*

B. Use of a range of effective teaching and learning strategies

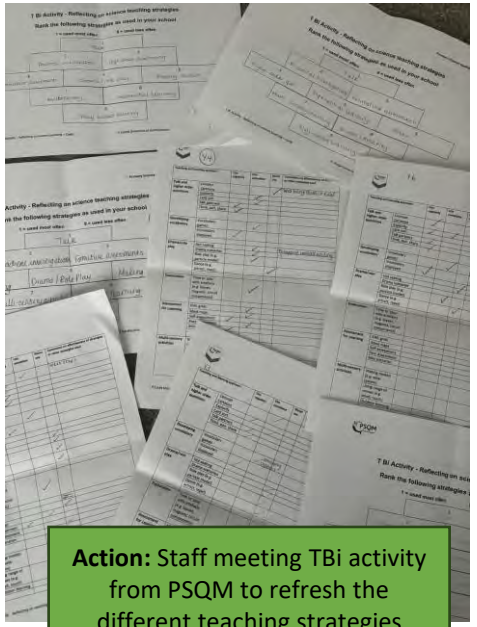
Before: Staff received CPD for a range of effective teaching and learning strategies in the last 3 years. Following staff voice and monitoring, many of the strategies are embedded; however, there was lack of recent training on science pedagogies. Some strategies needed to be revisited – concept cartoons, collaborative learning and a range of resources and ideas for EYFS to refresh the planning.

Impact: Teachers have proactively enhanced their teaching practices by further exploring an extended range of teaching strategies and utilising various educational websites such as Outstanding Science, Developing Experts, and Explorify. This has allowed for the development of concept cartoons, new explorify activities, and more collaborative lessons. This broaden pupils` exposure to different learning activities, catering to diverse learning styles and preferences. Children in EYFS enjoy "Zoom In" activities from Explorify. They are eager to talk about what they discussed in class.

Action: Teachers incorporating Explorify resources in lessons. Y4 investigating melting chocolate through group discussions and hands on investigation



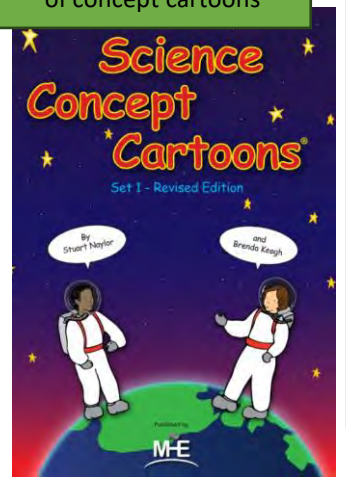
Concept cartoons are a great way for the children to critically think about their learning.
Teacher Year 6



Action: Staff meeting TBi activity from PSQM to refresh the different teaching strategies

Action: EYFS exploring dinosaurs' skeletons. A multisensory approach to Science reflects our principle of curiosity and further supports all learners access high quality Science learning opportunities

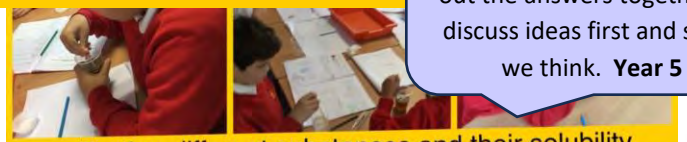
Action: Purchased a set of concept cartoons



Attending the staff meeting focused on various teaching pedagogies provided me with valuable insights to refresh my approach in the classroom. I found it highly beneficial to engage in ongoing exchanges of ideas and collaborate closely with my colleagues. I particularly enjoy using the concept cartoons as it is a great tool to discuss misconceptions. Children in my class really enjoy using them, even the less confident children.
Teacher Year 4

The best part of Science is when we get to ask questions and figure out the answers together. We can discuss ideas first and share what we think. **Year 5 pupil**

The links with the different explorify activities are very handy. I use the all the time with my Reception class. They love doing Zoom In or watch the short videos when we introducing new ideas.
Teacher EYFS



Testing different substances and their solubility

Action: Collaboration in Y5

Early Years
Explorify planning support

Curriculum statements	Explorify activities		Details
Animals			
Name and describe some plants and animals children are likely to see, encouraging children to recognise familiar plants and animals whilst outside. **Development Matters - England** I have observed living things in the environment over time and am becoming aware of how they depend on each other. **Scotland** I can recognise that plants and animals are living things which grow. **Wales**	Have you ever cared for a baby animal?	HYE	Get your children chatting about something they have all experienced.
	Black tips	ZIZO	Dog
	Stripes and patches	ZIZO	Dog
	Wavy hair	ZIZO	Donkey
	Watery home	ZIZO	Frog
	Spiky spikes	ZIZO	Hedgehog
	Grooved lines	ZIZO	Goat
	Fluffy and ginger	ZIZO	Horse
	Speckled and soft	ZIZO	Horse
	Brown hair	ZIZO	Rabbit
	Fluffy and white	ZIZO	Rabbit
	Curly locks	ZIZO	Sheep
	Green scales	ZIZO	Snake
	Small and hairy	ZIZO	Spider
	Thin strands	ZIZO	Squirrel
	Tangled up	ZIZO	Squirrel
	Shiny sections	ZIZO	Worm
	Down to dusk	LWCY	Birds
	Out and about	LWCY	Woodpecker, aeroplane, person walki
	Life in the wild	LWCY	Elephant, rattle snake and chimpanze
	Old MacDonald	LWCY	Cow, sheep and pig

Action: SL shared planning support documents with EYFS staff

Next Step: Facilitate time during staff meeting to discuss different teaching and learning strategies on a regular basis. Develop drama and role play as one of the strategies.

Science Teaching: PSQM Gilt

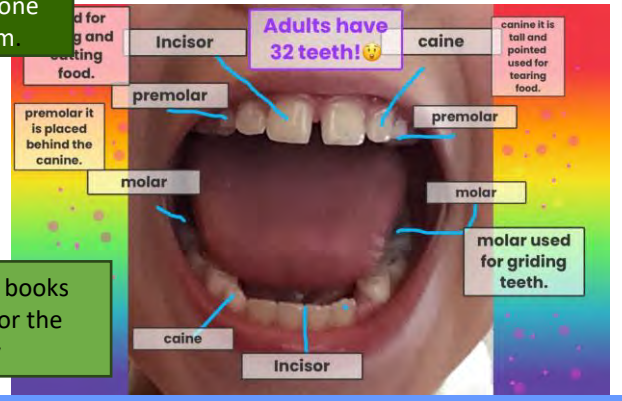
T Aim: *Science teaching is strengthened and developed through:*

C. Regular and safe use of up-to-date quality resources TC

Before: Teachers place orders for resources and books linked to Science topics through the Cheshire Library Service, to which the school holds a membership. It is the responsibility of each teacher to ensure that the orders are placed before the end of the term, facilitating delivery after the half-term break when we commence teaching new topics.

Action: Books and other resources from the Cheshire Library Service in EYFS , Y3 and Y4 on display, accessible for children

Evidence pre PSQM: Children in Year 4 utilizing iPads to capture images of one another's teeth and annotate them.

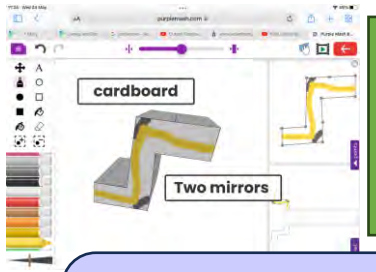


Action: New books purchased for the library

Impact: Quality equipment encouraged our pupils to explore and ask questions. It stimulated curiosity and a sense of wonder, promoting a proactive approach to learning as children seek to understand the "why" and "how" behind scientific phenomena.

Action: Children in Year 5 testing materials as the best thermal insulators

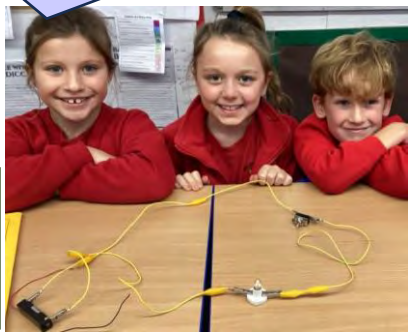
Before: Science resources were audited and organised a year ago. All is clearly labelled and accessible for staff in central place. (2022)



Action: Year 6 use Purple marsh website to design periscopes

"We had so much fun using the science equipment to learn about electricity! It was like being real scientists. The experiment with circuits and wires made it very interesting. **Year 4 Pupil**

Evidence pre PSQM: Teachers use CLEAPSS website for advice and risk assessment.



Evidence pre PSQM: : Teachers have access to Developing Experts and Outstanding Science websites

"I'm thrilled to share that our science cupboard is now impeccably organized! We've revamped the resource science cupboard, making it a well-arranged haven for all our teaching materials. This organized space not only enhances accessibility but also streamlines lesson preparations. **Message from SL**

RESOURCES ORGANISED

Impact: With resources neatly arranged and clearly labelled, teachers spend less time searching for materials. This time savings is redirected toward more meaningful instructional activities, improving overall productivity in lesson preparation. Pupil voice evidenced the impact of high quality resources on their learning - staff confident in tackling higher risk activities due to CLEAPSS support resources

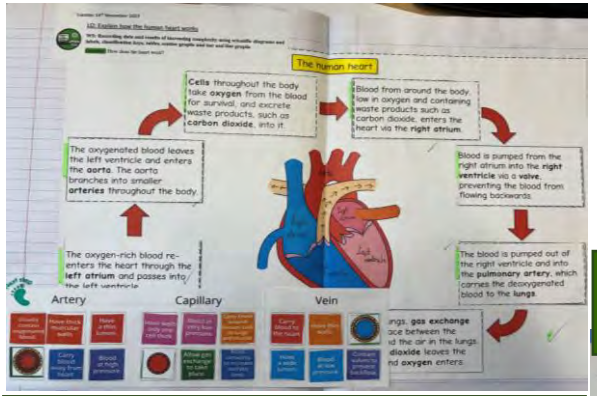
Next Step: Continue to monitor and order new resources. Establish sustained partnerships with cluster schools to pool training opportunities and share best practice and resources. Ask staff at the end of each unit, if there is enough resources for their topics.

Science Teaching: PSQM Gilt

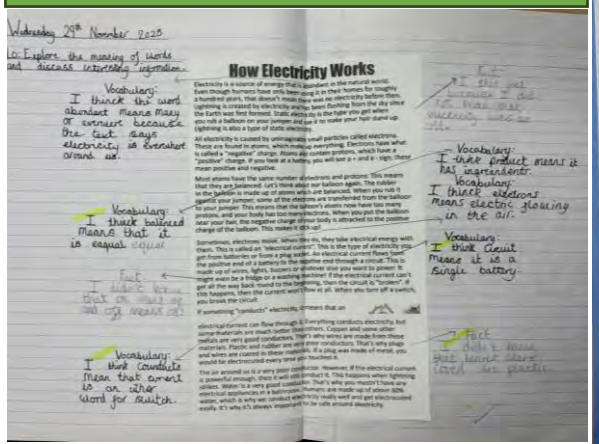
T Aim: *Science teaching is strengthened and developed through:*

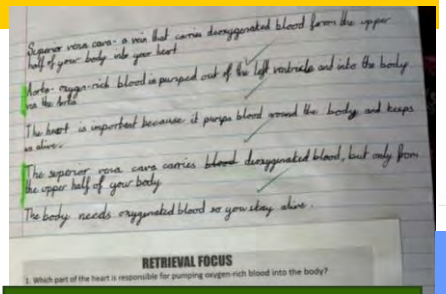
C. Quality science texts so children have regular and easy access to texts that are modern, relevant and age appropriate

Before: Several years ago, the school acquired a subscription to Literacy Shed, facilitating access to high-quality reading texts associated with science topics. Subsequently, the Reading Lead implemented a guided reading approach school-wide, ensuring that pupils dedicate time each week to engage with texts that are thematically linked to science, geography, and history subjects. This has been an ongoing focus to improve vocabulary across the school and literacy skills.

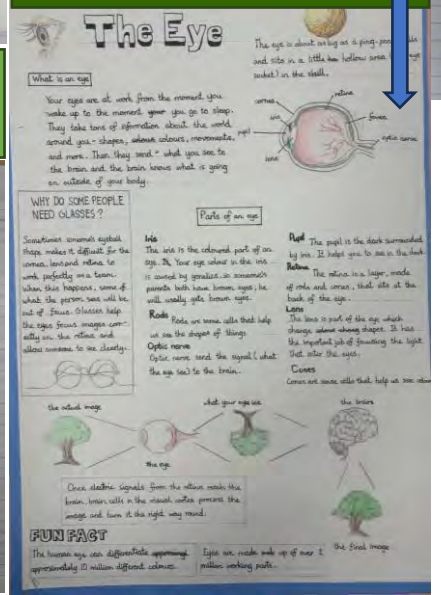


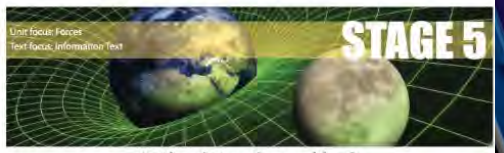
Action: Teachers do cross-curricular reading sessions when they analise a text linked to science unit.





Evidence pre PSQM: Writing linked to Science units in Y6





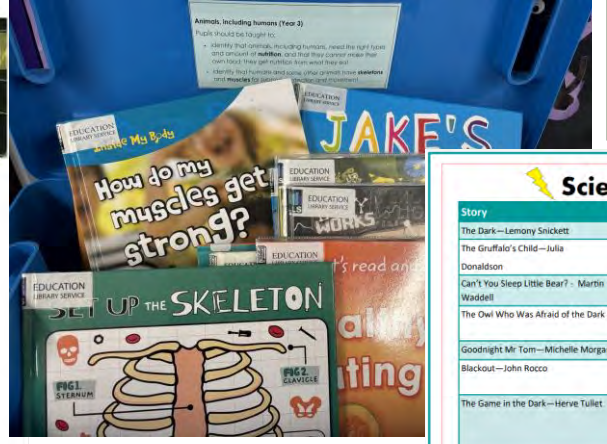
What Is Gravity?

Gravity is all around us. Everything that has a mass creates a gravitational pull - even the smallest grain of sand. The larger something is, the stronger its gravitational impact. Believe it or not, your gravitational pull is trying to pull things towards you all the time. Because you don't have a very large mass, it is very weak, and so you don't notice it.

There is an important difference between weight and mass. Weight is the mass of an object in a specific strength of gravity. Mass is how much of something there is. Because most of the things we weigh are on Earth and have the same strength of gravity acting on them, then the difference doesn't matter much. However, if you travelled to a planet with much stronger gravity, you would weigh a lot more. If the gravity was weaker, you would weigh a lot less. However, your mass would be the same no matter which planet you were on.

The gravitational pull of a planet is measured in metres per second, per second (or metres per second squared). This is because it is an acceleration force. Earth's gravity is just over 9m/s2. It means that when you are in freefall towards the centre of the Earth (freefall means that there is no air resistance or friction), you speed up by 9 metres per second, every second.

As you move away from the source of gravity, the strength of the force gets weaker. However, with large objects such as planets, you have to get a very long way away to notice an effect. There will be a small difference at the top of the tallest mountains (although not enough to notice), but even when you get into the Earth's orbit, the force isn't that much weaker. Astronauts on the International Space Station are still subject to Earth's gravitational pull. That means it is 90% as strong as it would be on isn't enough to allow them to float around in the way that they do, so wh



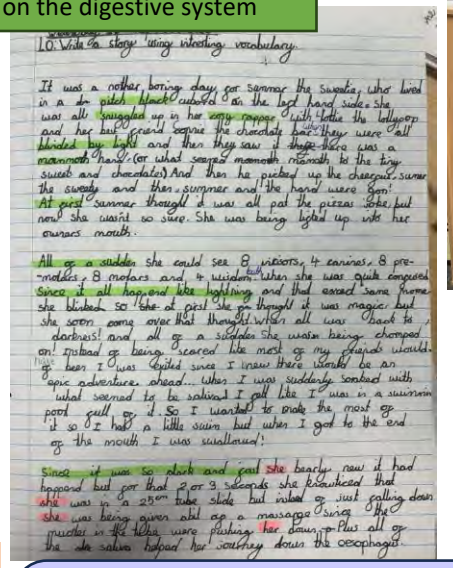
Evidence pre PSQM: SL shared a list of books with the staff linked to Science topics

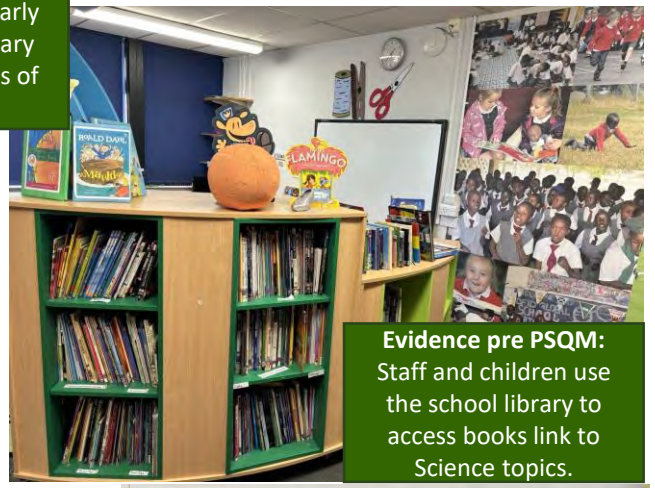
Science & Story Links - Light

Story	Suitable for	Possible Questions to Investigate
The Dark—Lemony Snickett	KS2	Does The Dark really behave like it does in the story?
The Gruffalo's Child—Julia Donaldson	EYFS, KS1, KS2	How could the mouse make his shadow even bigger/smaller?
		How could the mouse change the shape of his shadow?
Can't You Sleep Little Bear? - Martin Waddell	EYFS, KS1	What could little bear use to make it brighter in the cave?
The Owl Who Was Afraid of the Dark	KS1, KS2	Can owls see in the dark? If not, how do t hey hunt?
		What is 'dark'? Can you explain why Plop needn't be afraid?
Goodnight Mr Tom—Michelle Morgan	KS2	Which material will be best to blackout our windows?
Blackout—John Rocco	EYFS, KS1	What light can we find at night?
		What if we didn't have electric lights at school?
The Game in the Dark—Herve Tullet	EYFS, KS1, KS2	How are shadows formed?
		How can we change the shape/size of shadows?
		Which materials would be best for a book like this that casts shadows?

Evidence pre PSQM: Staff regularly order books from Cheshire Library Service that link to Science Units of work

Action: Year 4 writing based on the digestive system



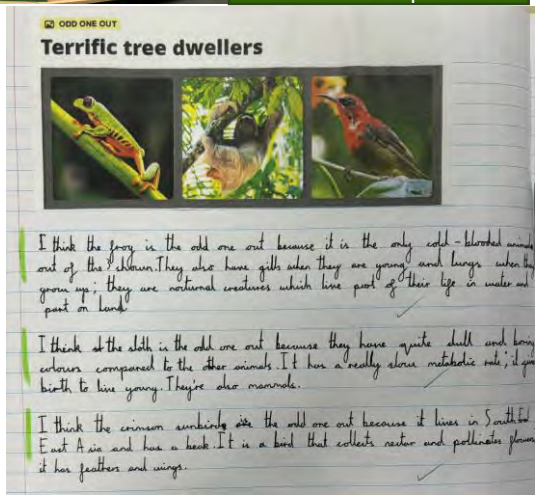


Evidence pre PSQM: Staff and children use the school library to access books link to Science topics.

Impact: Access to various books have improved research skills and subject knowledge over the last 2 years. This has been strengthened with cross curricular writing. This increased engagement in boys writing lessons linked to Science. Cross-curricular reading sessions, helped to improve use of scientific vocabulary.

Next Step: Continue to develop the use of scientific language and links to English by regular reading sessions linked to science topics studied.

The books help me to get a better understanding of the topics we're studying, and they make learning even more interesting.
Year 5 pupil



Science Teaching: PSQM Gilt

T Aim: *Science teaching is strengthened and developed through:*

C. Outdoor Science - Increased engagement and motivation (also LA and LC).

Before: Outdoor science education was limited, with numerous opportunities for learning science in the open air being overlooked. There was no mention of outdoor learning in our science policy. Staff felt that they need more support with planning outdoor lessons.

"I really liked going on a material hunt today! We walked around the playground, and our teacher gave us a list of things to find. We found different materials like wood, metal, and plastic. I touched them and talked about how they felt."

Action: Year 1 children on a material hunt around the school grounds

Science Policy, Egerton Primary School, September 2023,

Outdoor Learning

In addition to the above, Egerton Primary School recognizes the immense value of utilizing the school grounds for outdoor learning experiences, particularly in the context of Science education. The outdoor environment provides a rich and dynamic setting for students to explore, observe, and engage in hands-on scientific investigations.

Outdoor learning experiences are integrated into the Science curriculum to align with the school's commitment to learning outside the classroom. Teachers are encouraged to take advantage of the school's outdoor spaces, including the pond, garden, and school field, as extensions of the classroom. Practical experiences in these areas involve using equipment, conducting experiments, and building arguments, fostering a deeper understanding of scientific concepts.

The school embraces the philosophy that outdoor learning not only enhances academic achievement but also contributes to the overall well-being of students. Exposure to the natural environment fosters a connection with the world around them, encourages curiosity, and promotes a sense of responsibility for the living and non-living components of their surroundings.

Furthermore, the school actively seeks opportunities for outdoor workshops with experts and visits to places of scientific interest, ensuring that students
classroom setting. Cross-curricular connec
of outdoor learning.

By incorporating outdoor learning into the
exploration and discovery, nurturing inqu
approach aligns with the school's vision
appreciation for the wonders of the natural world and the scientific principles that govern it.

Action: SL updated Science policy

Action: SL lead PDM on outdoor learning

Outdoor Learning in the National Curriculum

Primary Science Education Consultancy

Why take learning outside?
Evidence shows that healthier pupils have higher educational attainment. There is substantial research that indicates that spending time outside increases levels of physical activity and mental health and wellbeing.

Teachers taking part in the Natural Connections project, funded by Defra, Natural England and Historic England and delivered by Plymouth University, reported that learning in natural environments had a positive impact on their pupils.

- Enjoyment of lessons (95%)
- Engagement with and understanding of nature (94%)
- Social skills (93%)
- Engagement with learning (92%)

Action: EYFS children sound making

Action: Y3 using the outdoor area and resources when learning about skeletons

Action: Year 3, children carried out an investigation to see whether plants need the same amount of soil nutrients in order to grow well.

Action: Science linked homework in Year 1

LO: Investigate how mould grows
WS: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
WS: Reporting and presenting findings from enquiries -
Enquiry: What conditions causes mould to grow?

LO: Understand the basics behind how light is refracted, how a rainbow is made and what happens when light hits a bubble

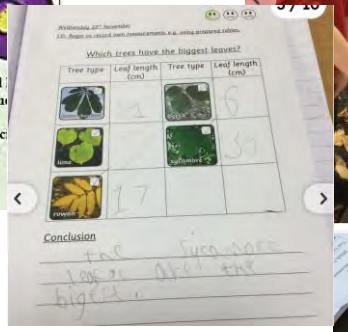
WS: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables whe
Using test results to make predictions to s
comparative and fair tests;
Enquiry: How is light use other than for us

Action: Year 1 using equipment to measure leaves

Lesson 8

Lesson 10
LO: Understand that shadows change length depending on how far away they are from a light source
LO: Understand how to collect data
WS: Recording data and results of increasing complexity using scientific diagrams and classification keys, tables, scatter graphs and bar an graphs
WS: • Taking measurements and using a range of sc equipment with increasing accuracy and precision;
Enquiry: How does my shadow change over the day?

Action: Outdoor lessons highlighted in green on planning documents. Children have more understanding about outdoor learning than last year.



Impact: Outdoor environments provide our children with rich, real-world contexts for learning, where theoretical knowledge can be applied in practical situations. Students enthusiastically engage with lessons conducted outdoors and eagerly share what they have learned. Moreover, identifying specific outdoor locations for learning activities allows teachers to seamlessly integrate outdoor elements into their lesson plans, thereby enriching the curriculum and offering students diverse learning opportunities. In collaboration with staff, the School Leader (SL) developed a Plant unit of work for each year group, resulting in the incorporation of more outdoor activities into the curriculum.

Science is all around us - sitting on a chair links with gravity. Things we invent for the world. New inventions to make life easier. Year 4 pupil

Action: Planting bulbs in Y2

tigtag | Imperial College London

ReachOut CPD

Congratulations to:
Chloe Thorpe
from
Egerton Primary School
completing the following primary school science CPD courses:
Outdoor Science (16/11/2023)

Action: SL completed Outdoor learning CPD, reviewed planning and together with staff plotted where outdoor learning should take place

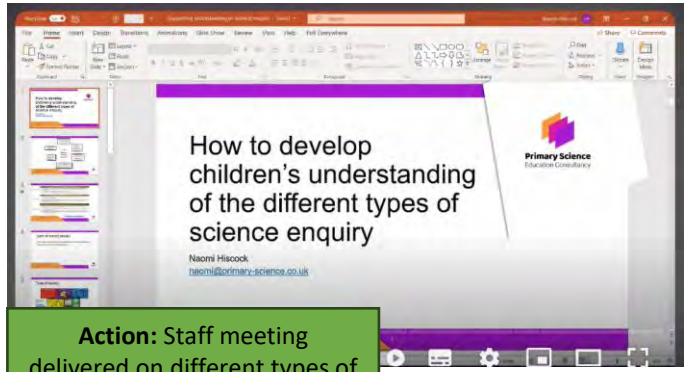
Next Step: Conduct Audit on the school grounds. Develop partnership with local environmental organisations and community groups to further enrich outdoor learning

Science Learning: PSQM Gilt

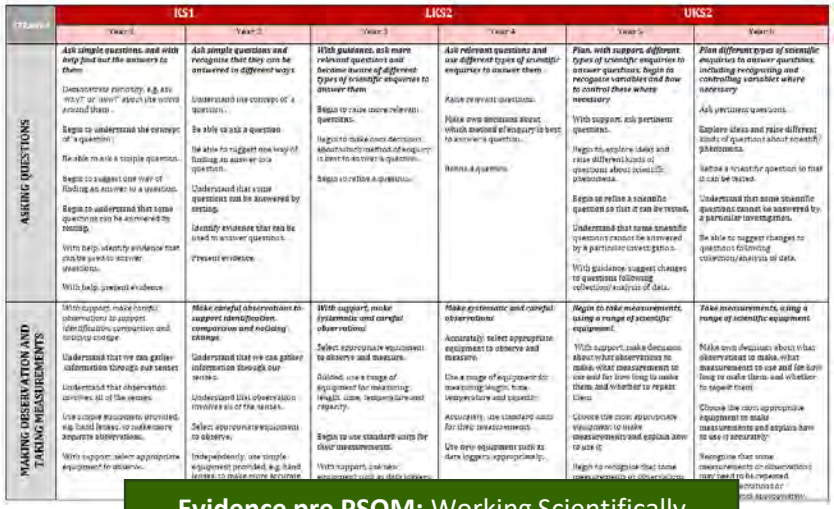
L Aim: *Science teaching is strengthened and developed through:*

A. The purposes and process of science enquiry

Before: Prior to the implementation of PSQM, five enquiry types were introduced to the staff and CPD delivered around planning and teaching the different enquiries; however, after staff voice, it became clear that not all staff members felt confident in delivering all of them. Consequently, pupils sometimes did not have the opportunity to experience a complete range of enquiries in every year group. Before PSQM, we had developed Working Scientifically skills by using PLAN and NC and sequenced all. This has been used in the below document, linked to Los and enquiry. WS skills are sequenced so children develop more independence over time.

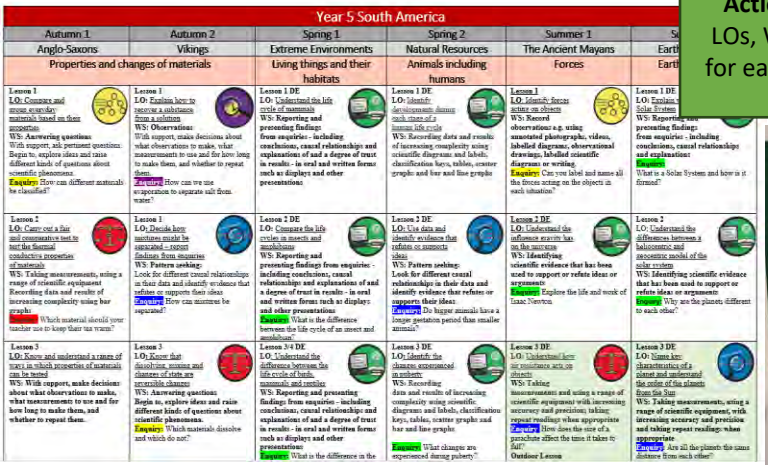


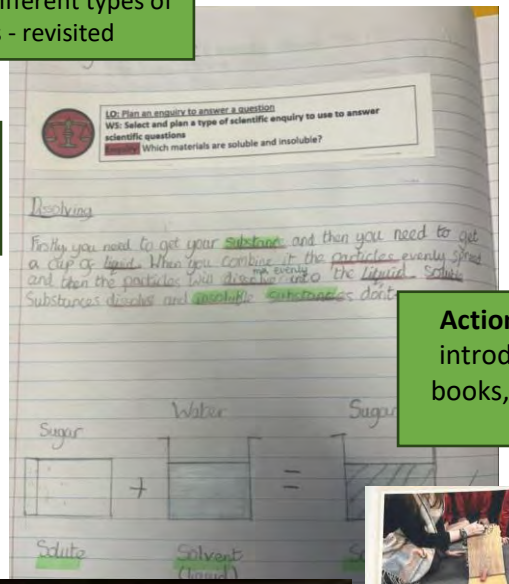
Action: Staff meeting delivered on different types of enquiries - revisited



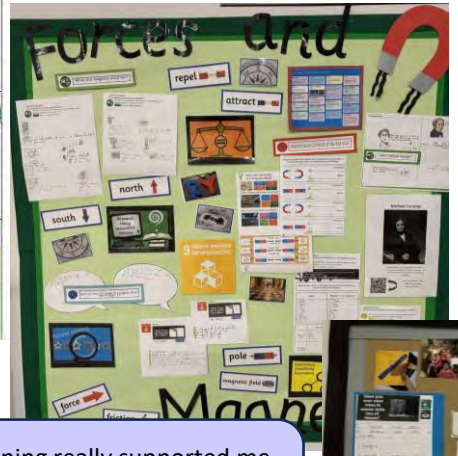
Evidence pre PSQM: Working Scientifically skills, sequenced and in line with NC – developed before PSQM

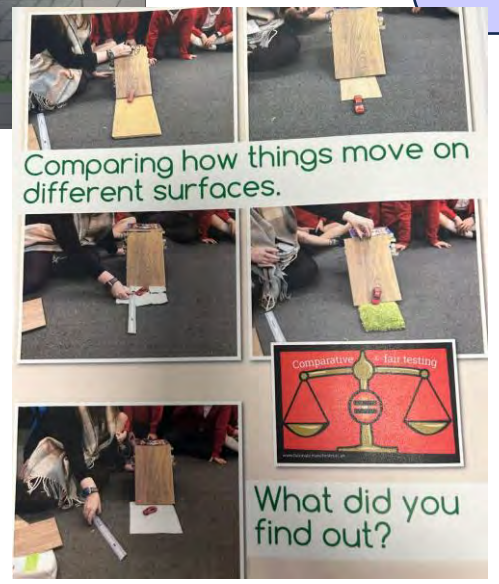
Action: SL and staff used STP to sequence LOs, WS and enquiries. There is a document for each year group outlining all the enquires and learning objectives.



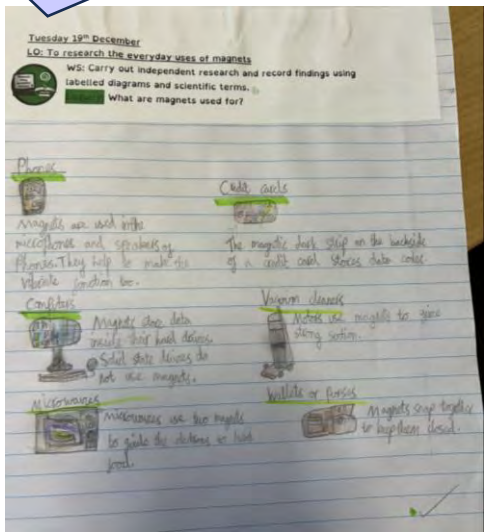


Action: Enquiry logos introduced in Science books, next to learning objective





I find the enquiries we engage in quite enjoyable, and having the logos next to our learning objectives is really helpful. It helps my memory and makes it easier for me to understand what we are learning about.
Year 6 pupil



Impact: Teachers now exhibit increased confidence in employing various types of enquiry. Each classroom features a dedicated science display showcasing the five enquiry skills. During lessons, teachers openly communicate with children about the specific enquiry skill they are focusing on, fostering a more interactive and informed learning experience. **Pupils remember the different enquiries and can explain each of them.**

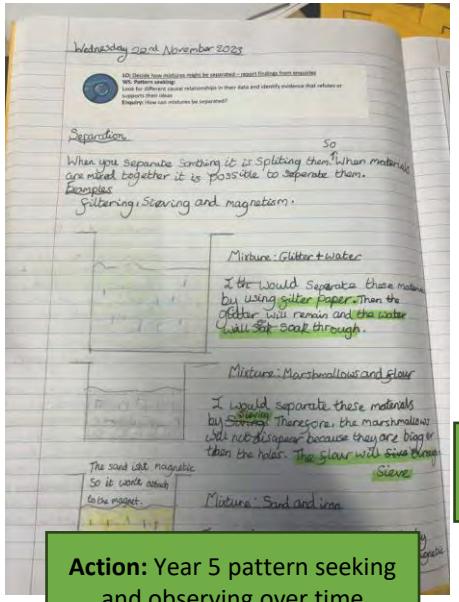
The planning really supported me as I sometimes struggle with selecting different enquiry types.
KS2 Teacher

Action: Whole school display celebrating examples of enquiry types from EYFS to year 6. This was also used as a moderating activity for science lead.

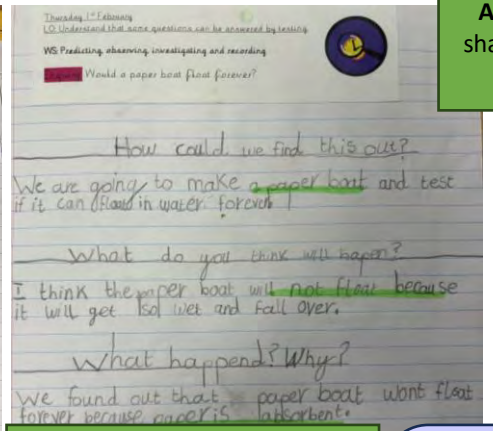
Science Learning: PSQM Gilt

L Aim: *Science teaching is strengthened and developed through:*

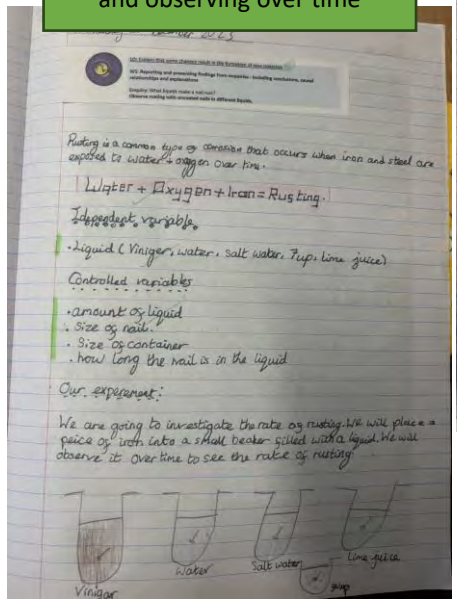
A. The purposes and process of science enquiry

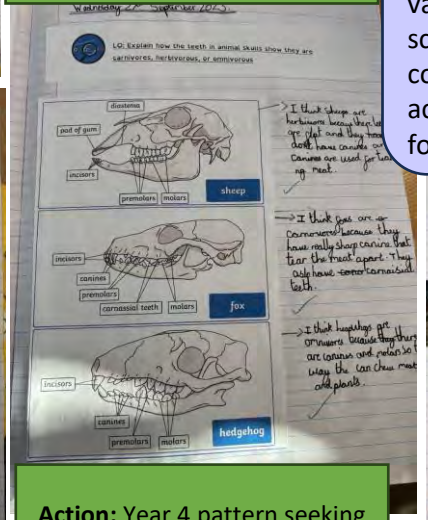


Action: Year 5 pattern seeking and observing over time

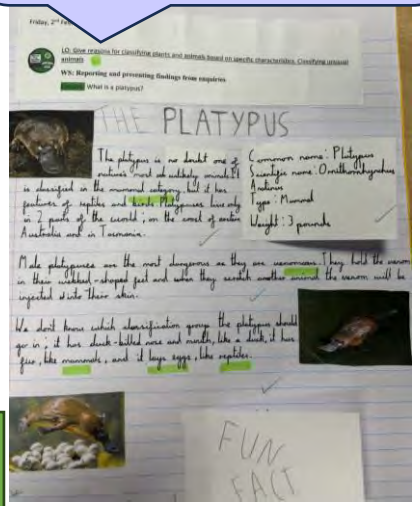


Action: Year 2 observing over time



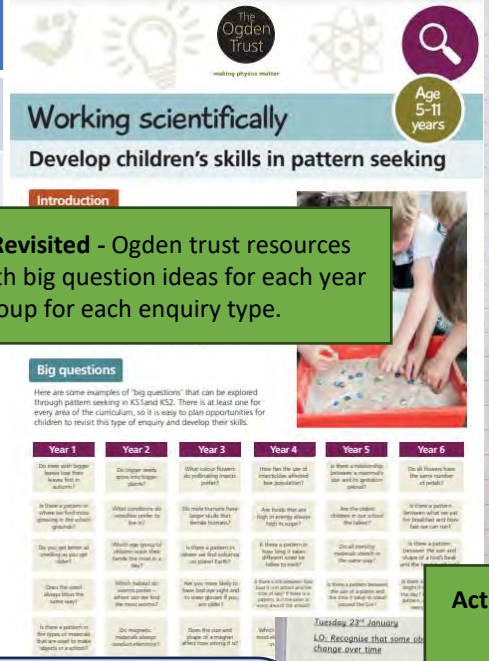


Action: Year 4 pattern seeking

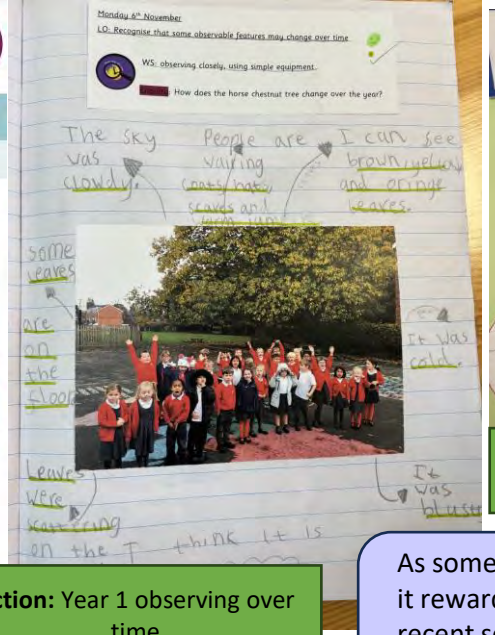


Action: Year 6 research

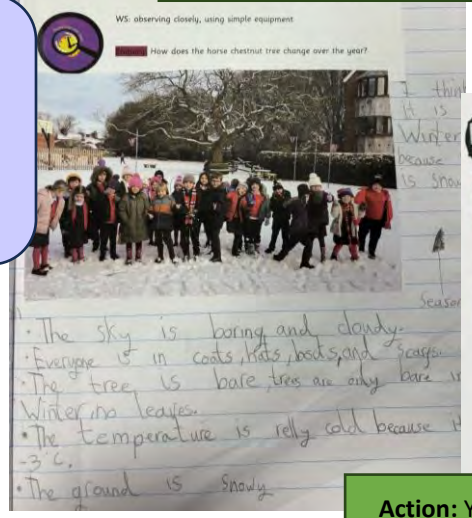
Action: Revisited - Ogden trust resources shared with big question ideas for each year group for each enquiry type.



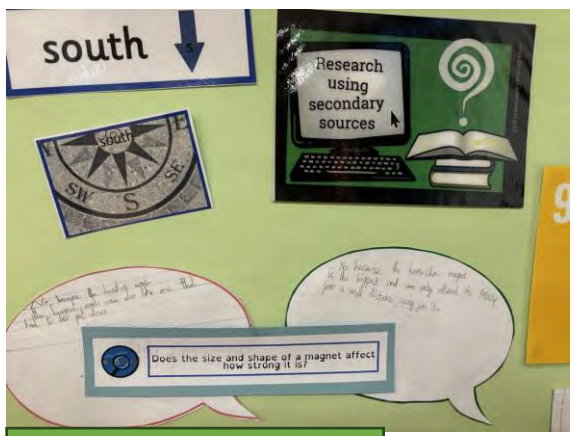
The book monitoring revealed a uniform approach to teaching various types of enquiries across the school. Students demonstrate a consistent ability to discuss their activities and provide justifications for their answers. **Science Lead**



Action: Year 1 observing over time



Action: Year 4 research



Action: Part of Year 3 display

As someone who works in the field of STEM, I found it rewarding to talk with my children about their recent science activities and hear them mention the enquiries they've been conducting in class.
Parent KS2

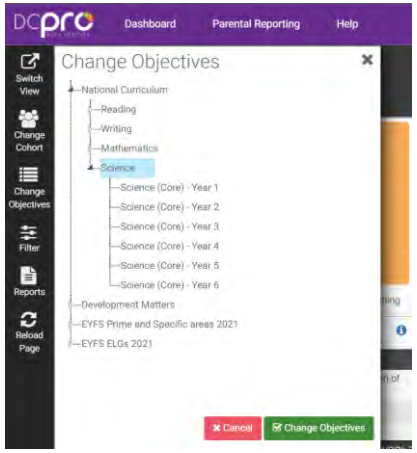
Next Step: Continue to plan staff meetings with the aim of enhancing teachers' subject knowledge of various enquiry types. This will empower teachers to guide children in independently determining their own enquiry types during investigations.

Science Learning: PSQM Gilt

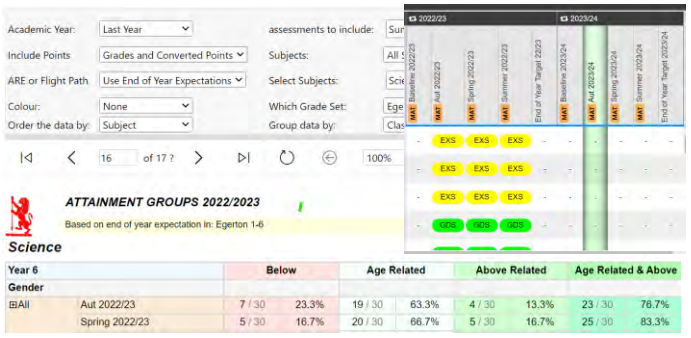
L Aim: *Science teaching is strengthened and developed through:*

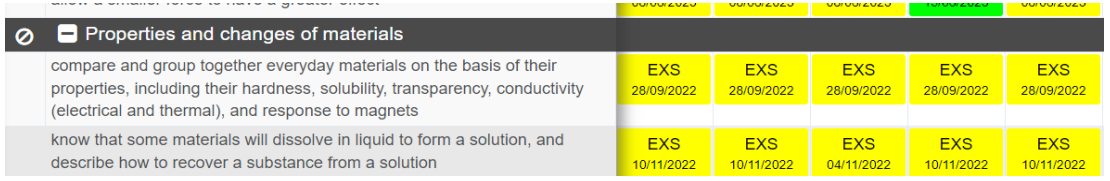
B. The purposes of science assessment and current best practice

Before: The DCPro assessment system monitor students' progress. Teachers use it regularly to assess each objective. It is worth noting, however, that discussions about science did not take place during the termly progress meetings.

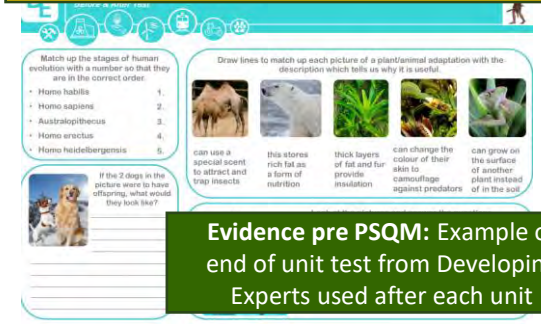


Action: SL used DcPro system to generate reports and summative overviews. This was shared with SLT. Progress meetings include discussion about progress in science.



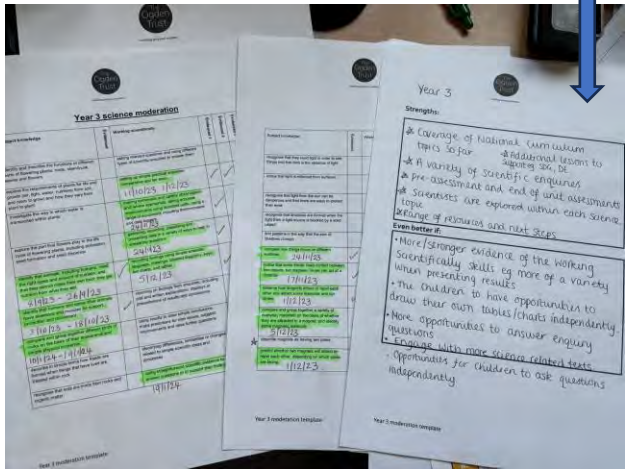


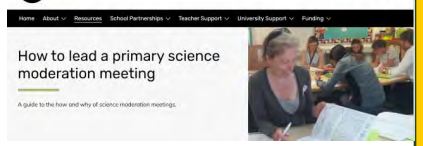
Before: DcPro – each teacher assess knowledge and scientific skills. Group tracking reports provide detailed information about how individuals have progressed through the year. Data is passed and discuss during transition meetings at the end of the year.



Evidence pre PSQM: Example of end of unit test from Developing Experts used after each unit

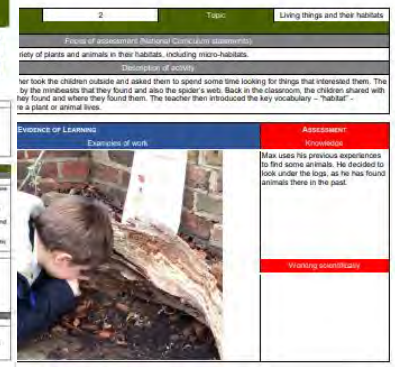
Impact: Additionally, incorporating science discussions into progress meetings has fostered a more holistic approach to student assessment and support, ensuring that science education receives the attention it deserves within the school's academic framework.





Action: Moderation took place in Spring Term. Use of templates from the Ogden Trust supported the process.

Action: Teachers used exemplification materials for assessment when moderating work



Before: Documents shared with staff. Although, the planning matrices serve the dual purpose of aiding in lesson planning and teaching, as well as functioning as a document for moderation, they were not fully used when planning and assessment by all staff

Impact: Teachers refer to the documents outlining the progression of skills and knowledge to review both past and upcoming information. Staff voice highlighted that these documents serve as valuable tools for teachers in planning lessons and conducting assessments.

Next Step: Moderation meeting to take place again in the summer term and focuses on identified next steps for each year group. Impact report for governors to be written in Summer term.

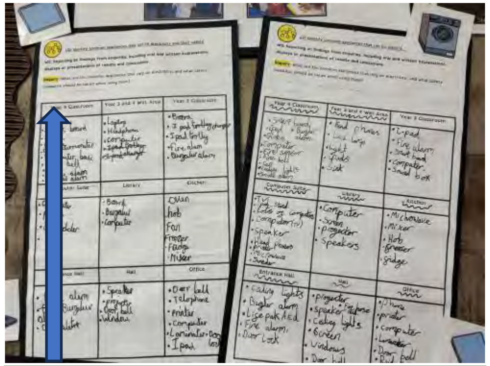
The materials are exceptionally clear and well-structured. The detailed breakdown of assessment criteria is particularly helpful, providing a comprehensive framework that guides me in evaluating children performance.. **Teacher Voice**

Science Learning: PSQM Gilt

L Aim: *Science teaching is strengthened and developed through:*

B. The purposes of science assessment and current best practice. Slide shows evidence from before and during PSQM

Before: Many different assessment strategies were introduced a few years ago. SL makes sure staff have access to new approaches by facilitating dialogues between staff during staff meetings. Staff uses assessment to inform planning and amend if necessary.



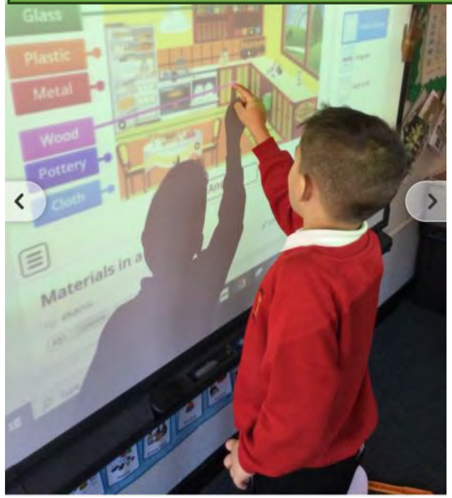
Action: Focused LO - objective and WS during each lesson; recorded in books and discussed with children

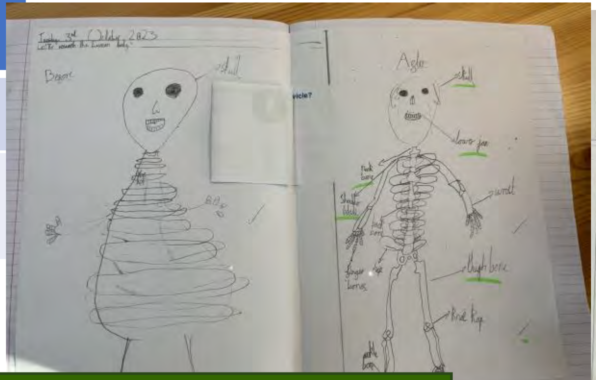
Before: Learning objectives were clear, however working scientifically skill was not included next to the LO.

Impact: Being clear about which part of Working Scientifically is the focus for the lesson helps to make the teaching and any pupil recording more manageable. Having one element as the focus helps to manage the cognitive load of practical activities. **Staff Voice**

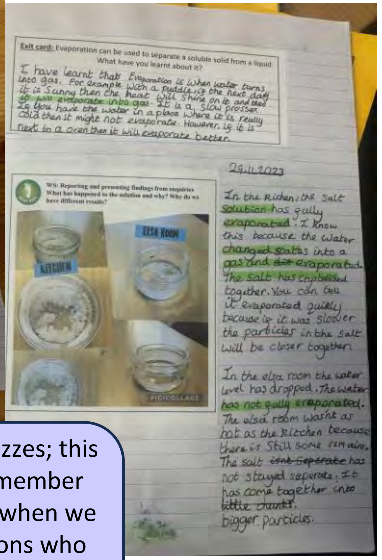
When we focus on one exciting thing at a time, it's like following a treasure map. It helps us have more fun during experiments and makes everything less tricky to understand.
Year 5 pupil

Evidence pre PSQM: To reinforce prior learning, and support short interventions, retrieval starters have been revisited, quizzes, covering material from various timelines, including the previous week, month, or even year.

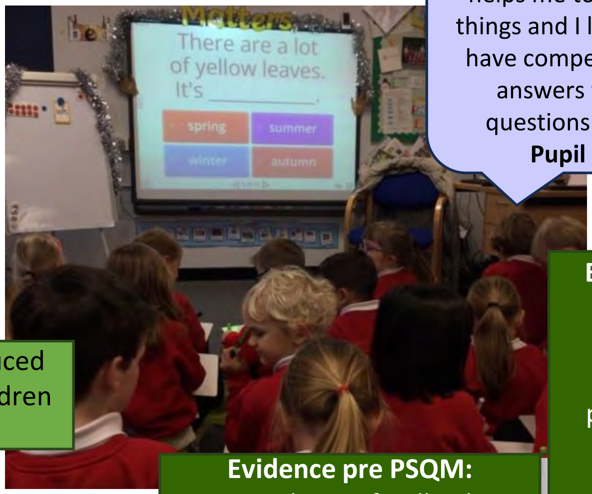




Evidence pre PSQM: Pre and pot assessment in Year 3



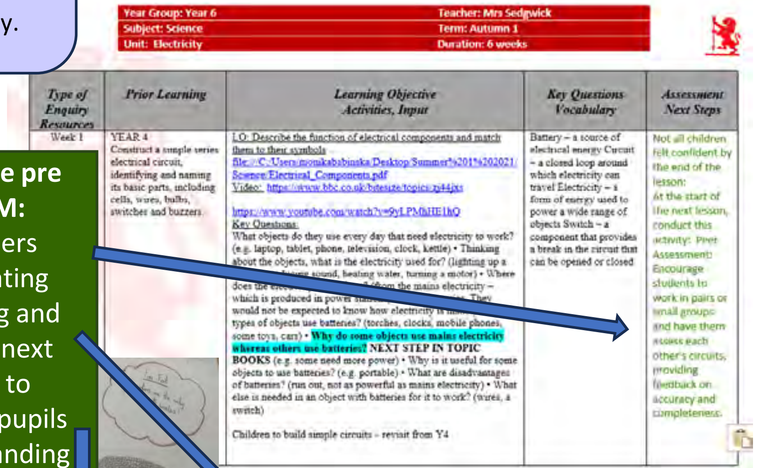
I enjoy doing quizzes; this helps me to remember things and I like when we have competitions who answers the most questions correctly.
Pupil Voice



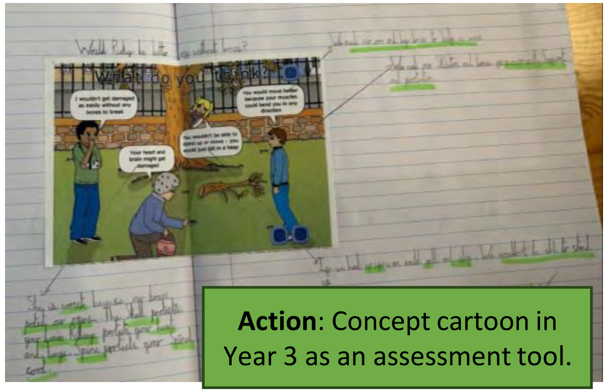
Action: New website WORDWALL introduced in Autumn term – quizzes and games. Children enjoy playing different games.

Evidence pre PSQM: Responding to feedback in Y6

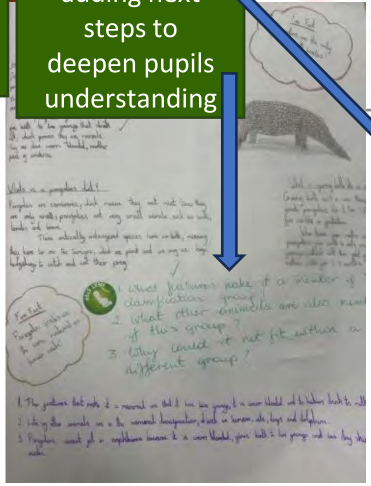
Action: EYFS children are learning about forces – display as an assessment wall

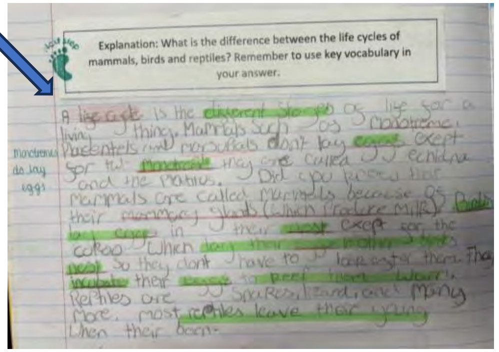


Evidence pre PSQM: Teachers annotating planning and adding next steps to deepen pupils understanding



Action: Concept cartoon in Year 3 as an assessment tool.



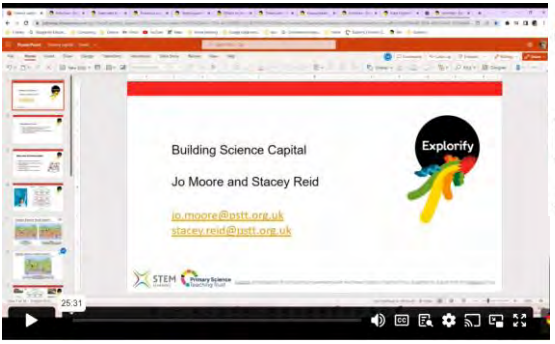


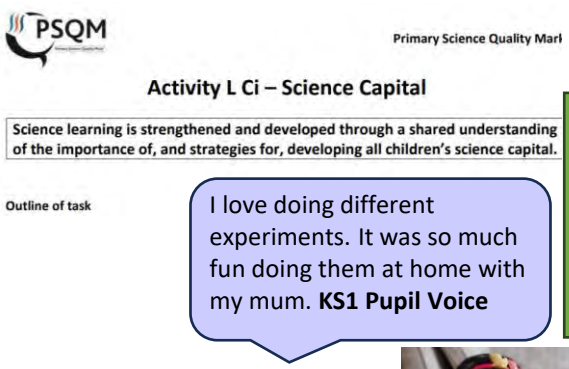
Science Learning: PSQM Gilt

L Aim: *Science teaching is strengthened and developed through:*

C. The importance of, and strategies for, developing all children's science capital

Before: There were many opportunities already incorporated in our Science curriculum to develop science capital. However, after a staff voice it became clear that not all staff have the same, deep understanding about science capital, therefore some opportunities, sometimes were missed.





Action: Science lead led staff INSET on Science capital to revisit this and embed understanding among staff

I love doing different experiments. It was so much fun doing them at home with my mum. **KS1 Pupil Voice**

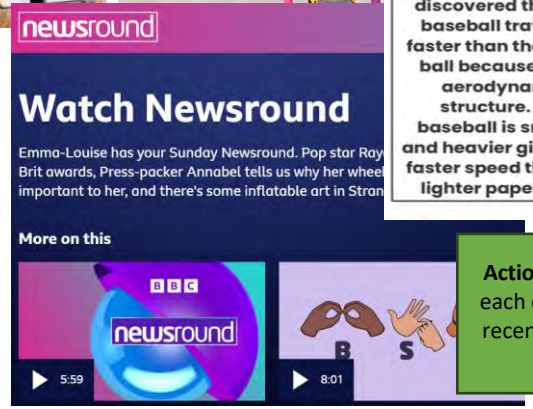
Evidence: Scientists that the children learn about in Year 2 revisited to ensure diversity.

I really want to be a scientist when I'm older. I enjoy investigating things and mixing different liquids to find out what will happen. **Year 4 Pupil**

Action: SCIENCE WEEK to develop children`s science capital 2023. Families involved in science activities.

Evidence: Cross curricular reading and writing activities incorporate finding out about famous scientists - display of Year 5 work.

Impact: The staff meeting on science capital was very beneficial and refreshed staff knowledge about cultural capital. They gained deeper understanding of the concept to further incorporate different strategies.



Action: Children watch Newsround each day. They stay informed about recent developments in the field of science

Science Learning: PSQM Gilt

L Aim: *Science teaching is strengthened and developed through:*

C. The importance of, and strategies for, developing all children's science capital

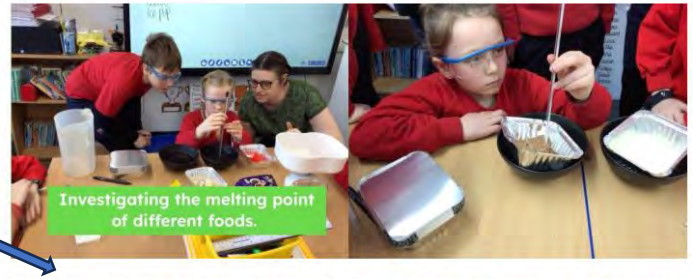
Action: Year 6 programming and flying drones with Tom from STEM ambassador.

Before: STEM visitors were invited to school predominantly for STEM week. Moving forward, the SL to focus on inviting visitors throughout the year to continually enhance children's experiences in science. Also, there was not a consistent science focus in our school weekly newsletter.

Action annual event: EYFS pond dipping in Norton Priory. Promoting science for everyone

"A scientist is someone who asks really cool questions and then tries to find the answers by doing experiments and investigations. **Year 3 Pupil Voice**

Action: Teachers incorporate "What is a scientist?" into the beginning and end of each new unit of work. Pupil voice shows the question and answers from Y5 children



Action: Science work is shared with parents and the wider community in a weekly newsletter

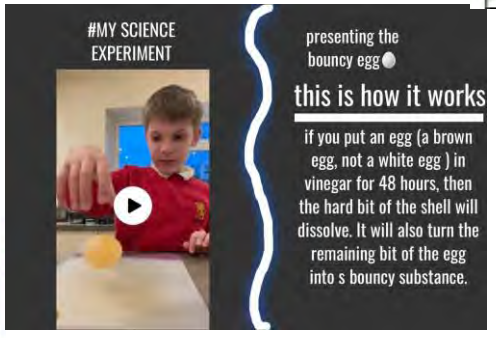
During Science this week, Year 4 carried out an investigation into the different melting points of foods. We wanted to discover if all foods melted at the same temperature. Working as scientists, we used a thermometer to accurately read the temperature as soon as the food had melted and we shared our results in a line graph. We have been exploring how to create a line graph during our maths lessons.

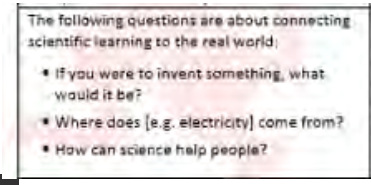
This week the children have been learning about dinosaurs! We started on Mond by discovering some foss dinosaur eggs under the trees on the big playground. When we had a chat about w at we thought they were opened them up and found tiny fossilised dinosaur skeletons inside! On Wednesday, ve learnt about all the different dinosaurs and spent some time thinking about whether they are carnivores, erbivores or omnivor looking at their distinguishing features.

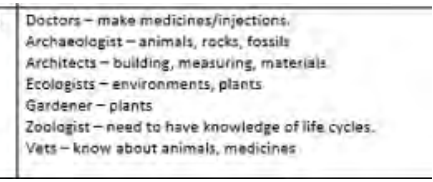
Class 1 carried out a comparative and fair test today to find out which material would be most suitable (waterproof) for an umbrella. We did this by placing different materials over a beaker with an object in and using a pipette to drip water on top. The best materials kept the object dry.

Next Step: : To repeat science capital questionnaires to measure impact of activities. Incorporate more visits and visitors to develop science capital.

Action: Science at home activity Y5

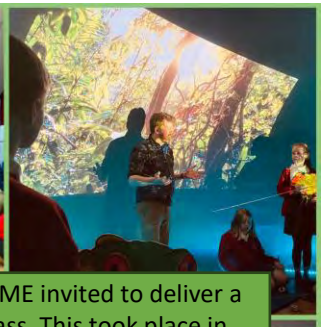




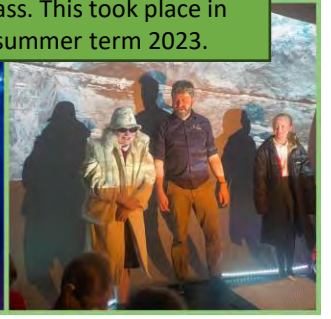


Impact: The introduction of posters on "What is a Scientist?" and engagement in science projects and homework helped broaden children understanding of the diverse roles and opportunities in the field of science. They enthusiastically take part in projects at home and are very keen to involve family members. Parents get regular updates through weekly newsletter. This involvement not only enhanced communication between the school and families but also encourages families to support and reinforce scientific inquiry at home.

I really, really liked being in the big dome! And guess what? I know the names of all the planets! **KS1 Pupil Voice**



Action: EXPLORER DOME invited to deliver a workshop to each class. This took place in 2022 and again in summer term 2023.

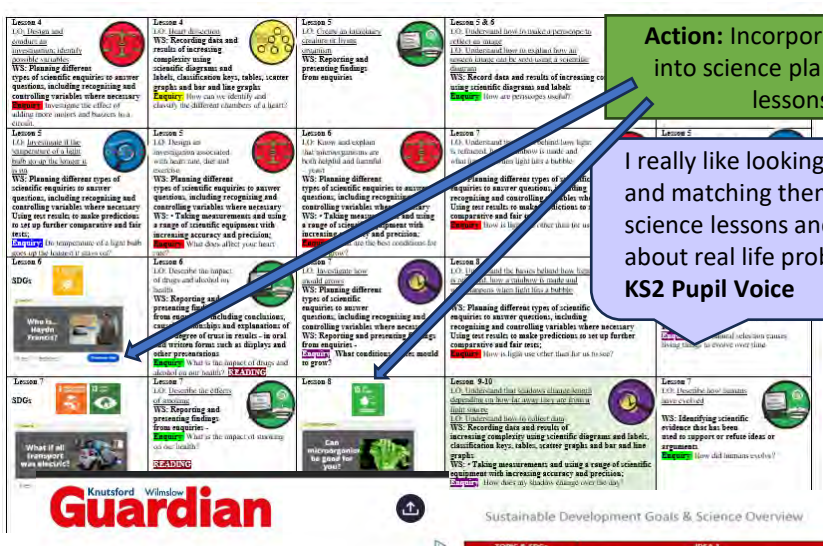


Science Wider Opportunities: PSQM Gilt

WO Aim: *Science is enriched by:*

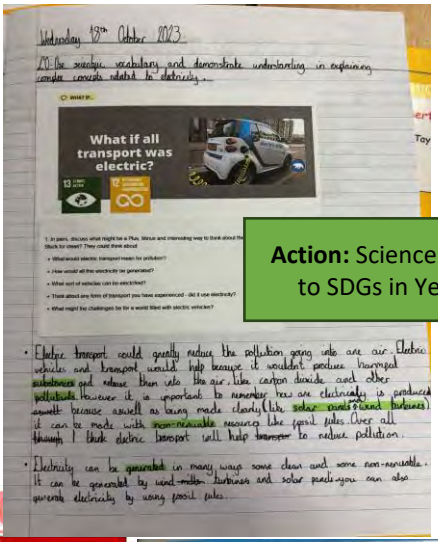
A: Cross-curricular planning that links science to other areas of learning; development of SDGs through science lessons

Before: Our school has a comprehensive planning approach that integrates science with other subjects, identifying various potential activities across the curriculum. However, despite our status as a global learning school with a longstanding partnership with a school in Kenya spanning 15 years, we have not yet established robust connections between our science curriculum and the Sustainable Development Goals (SDGs). It was imperative for the Science Subject Leader to strengthen science education by aligning it with real-world global challenges, thus enriching our students' understanding of global issues and fostering a sense of responsibility towards sustainable development.



Action: Incorporating SDGs into science planning and lessons

I really like looking at SDGs and matching them with our science lessons and learning about real life problems.
KS2 Pupil Voice



Action: Science linked to SDGs in Year 6

"Incorporating Sustainable Development Goals into our science curriculum has been transformative for my teaching practice. It has challenged me to think more deeply about the global impact of our lessons and has inspired me to explore innovative ways to engage children with real-world issues.
Teacher Voice

Action: Parent visit - assembly; linked to SDG 15 Life on Land

Action: Parent Vet visit to Year 1; promoting science for everyone linked to SDG 15 Life on Land and careers

"One of the most gratifying aspects of our science curriculum is seeing our pupils engage with real-world issues through the lens of Sustainable Development Goals. It's inspiring to witness their enthusiasm as they connect classroom learning to meaningful global challenges."
Headteacher

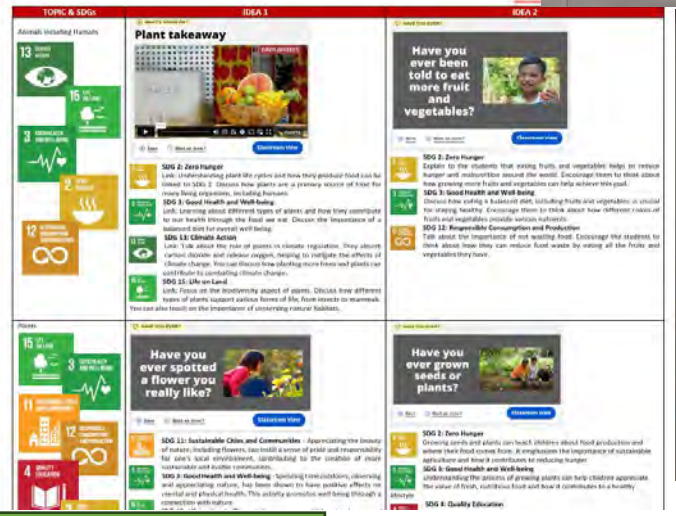
Knutsford Wilmslow **Guardian**

Mrs Hooper said: "We were extremely proud to accept Egerton's fifth International School Award, confirmed in June and representing 15 years of excellence in global learning.

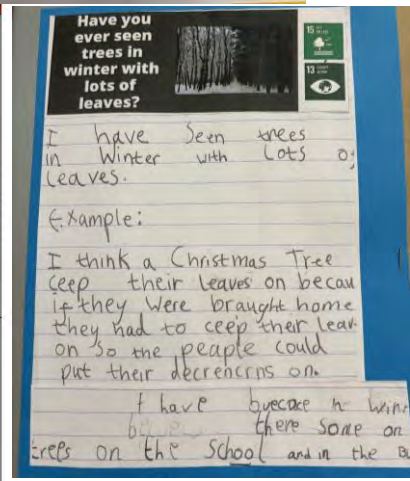
"This is in recognition of the school's commitment to ensuring the children are supported in developing skills such as critical thinking and problem solving when learning about their world."

Alison Hooper, former head teacher of Egerton Primary School with the award and some of the children's international work *(Image: Egerton Primary School)*

The school has formed a unique partnership with teachers and children in Africa.



Evidence: June 2023 Fifth International School Award



Action: Science linked to SDGs in Year 1

Next Step: Staff and pupil voice in summer term focusing on SDGs. Continue to develop stronger links between Geography and Science. Field Trips and Outdoor Activities: Organise field trips to eco-friendly facilities, research centres, or places where sustainability initiatives are in practice, providing pupils with practical examples of SDGs in action.

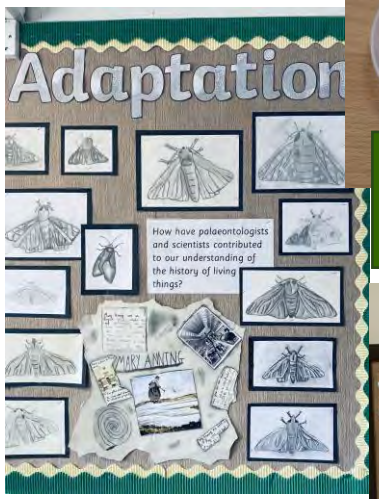
Impact: Through collaborative Professional Development Meetings, teachers have been empowered to align science topics with Sustainable Development Goals, fostering ownership and commitment. This integration has expanded pedagogical approaches, deepened pupil's understanding of global issues, and nurtured a sense of global citizenship and responsibility among young scientists – evident through pupil and staff voice.

Science Wider Opportunities: PSQM Gilt

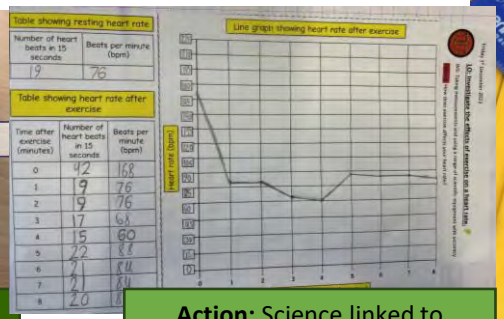
WO Aim: *Science is enriched by:*

A: Cross-curricular planning that links science to other areas of learning;

Evidence pre PSQM: Science linked with Art: Sketching moths in Y6; planets in Y5



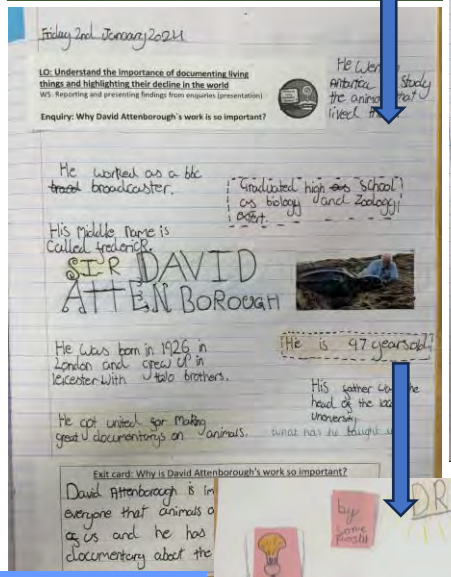
Evidence pre PSQM: Year 6 learn about micro-organisms; they used playdough to represent it..

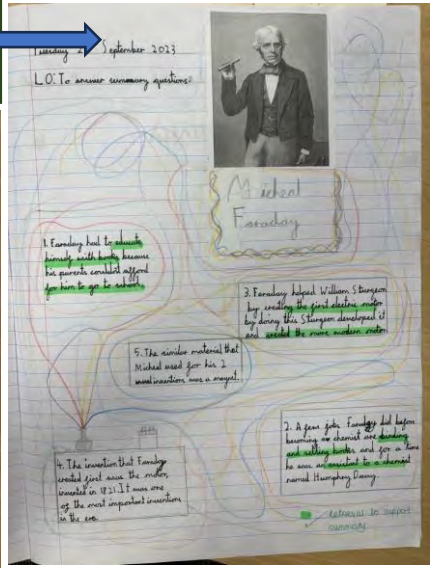


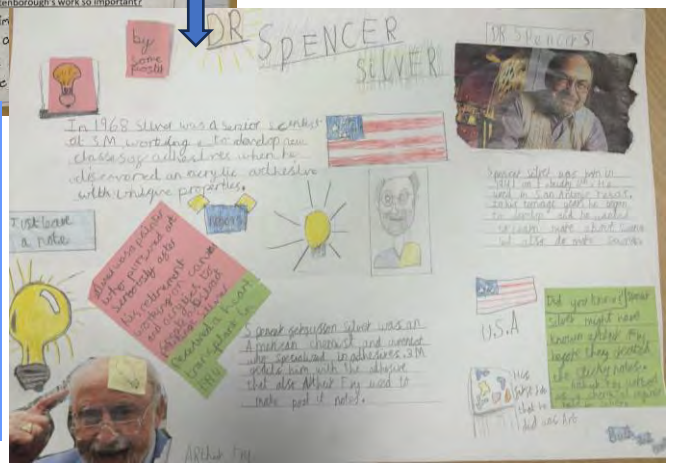
Action: Science linked to maths in Year 6 and Y1

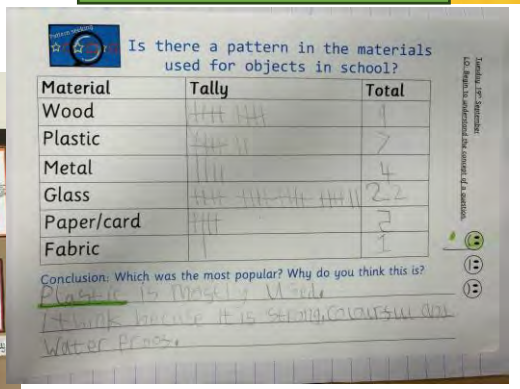
Action: Maths and Science in Y1

Evidence pre PSQM: Children research information about scientists that they study

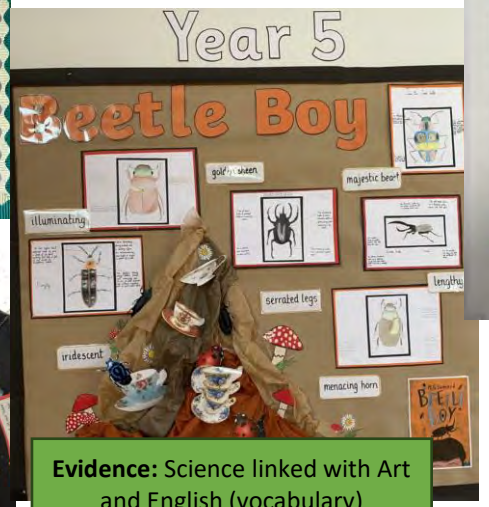








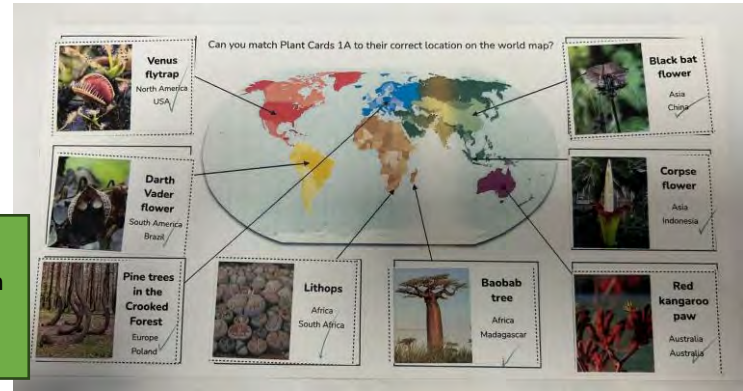
Impact: Deepened Understanding: Integrating science with other subjects allowed children to see how scientific concepts relate to real-world contexts and other areas of study. This deeper understanding enhances their grasp of scientific principles and fosters connections between different fields of knowledge as showed during pupil voice.



Evidence: Science linked with Art and English (vocabulary)

Impact: Professional Growth: Collaboration between different subject leaders provided opportunities for professional growth as educators share expertise, exchange ideas, and learn from one another's teaching practices. This shows more cohesive approach to curriculum delivery and more meaningful connections. **Staff Voice.**

Next Step: Project-Based Learning: Design interdisciplinary projects that incorporate scientific concepts along with other subject areas. For example, children could work on a project that combines science, technology, engineering, and mathematics (STEM) principles with elements of history, geography, or art. This approach encourages critical thinking, collaboration, and problem-solving skills while reinforcing learning across multiple disciplines.



Action: Science and Geography linked in Y3 when learning about plants and biomes

Science Wider Opportunities: PSQM Gilt

WO Aim: *Science is enriched by:*

B: Develop after school club links. Children have opportunities to enhance their science learning through enrichment activities.

Before: There was no after school club linked to Science. Gardening club was introduced last spring term. Eco Ambassadors started in September 2022. We wanted to increase the number of visitors to school and add new after school clubs.

Action: Eye dissection in Year 6 with a Science teacher. Year 6 were able to write a detailed explanation about how the eye works after the session, including scientific, accurate vocabulary

Evidence pre PSQM: Eco ambassadors across the school established couple of years ago. Meetings every 3rd week.

Action: Mad Science After school Club – Spring 2024

I really enjoy coming to our science club. We do different things each week. Last week we learnt about electricity and this week we were investigating forces.
Pupil Voice

Thank you for introducing few different after school clubs. My children love attending Mad science and Coding clubs. They can not stop talking about it.
Parent Voice

Impact: The Science club collaboration with Mad Science proved highly successful. Enthusiastic participation from attending children was evident, with each session met with great enthusiasm and excitement. The children thoroughly enjoyed their experiences and expressed a keen desire to continue attending the club into the next term.

PrimeVR Booking <booking@primevr.co.uk>
To: Monika Sedgwick
Cc: Egerton Primary Admin

Action: VR experience booked for KS2

Hi Monika,

Thank you for choosing PrimeVR for your VR experience day.

Your booking is now confirmed for **Tuesday 12th March 2024** with **Duncan**.

Evidence pre PSQM: Gardening Club focus is biodiversity, encouraging insects to visit our school grounds

Action: Coding Club, led by a parent started in Spring Term

This half term in Coding Club the children have had an introduction to LEDs and electronics; made name badges, virtual dice and games with the Microbit; tried their hand at Scratch and Python; sent each other short messages using radio waves; and submitted code to entertain the astronauts on the International Space Station.
Coding Club Lead (Parent)

Next Step: Conduct pupil voice to gain better understanding around pupils interest and continue to further develop the after school provision linked to STEM.

Impact: Working together in the garden fostered teamwork and cooperation among our children. It provides supportive and inclusive environment. Children that do not have large gardens at home, enjoyed being part of the gardening club at school.

Evidence pre PSQM: Eco Ambassadors involved in different projects – bird feeders