

SL/A: Science subject leadership is strengthened and developed through the creation and implementation of a clear vision for science

Pre-PSQM

During PSQM

Impact

Reflection

There was no clear vision for science and no agreed set of principles in place.

Staff were asked before the Staff Meeting to think of 3 Key Drivers for Science at our school. This was then collated

All staff completed Diamond 9 activity to agree new principles and vision.

Science Key Drivers

- Independence
- Curiosity
- Investigative Skills
- Talk like a Scientist
- Enjoyment
- Enquiring Minds
- Make Connections
- Teamwork
- Outdoor Learning



Everyone is aware of the vision for Science and what Science is at Scott Primary School. Staff implement lessons that meet the vision. E.g. pupils are encouraged to make connections through regular retrieval practice and reference to sticky knowledge boards. This was seen in lesson observations and on displays

Feedback from Pupils, Teachers and Parents helped to create the Science Vision:

Science is going well when ...

"We can find things out", Year 1

"We complete experiments", Year 4

"You have the opportunity to show curiosity and questions", Teaching Assistant

"Have the opportunity to explore and find things out", Year 5



It was very useful to get the staff involved in the creation of the vision as it enabled them to have ownership of it. Staff are now focussed on the key drivers such as curiosity and investigative skills, leading to more engaging science lessons. Staff are now focussed more on skills where the children are given opportunities to plan their own investigations. This is improving their enquiry skills and their levels of independence.

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Pre-PSQM

During PSQM

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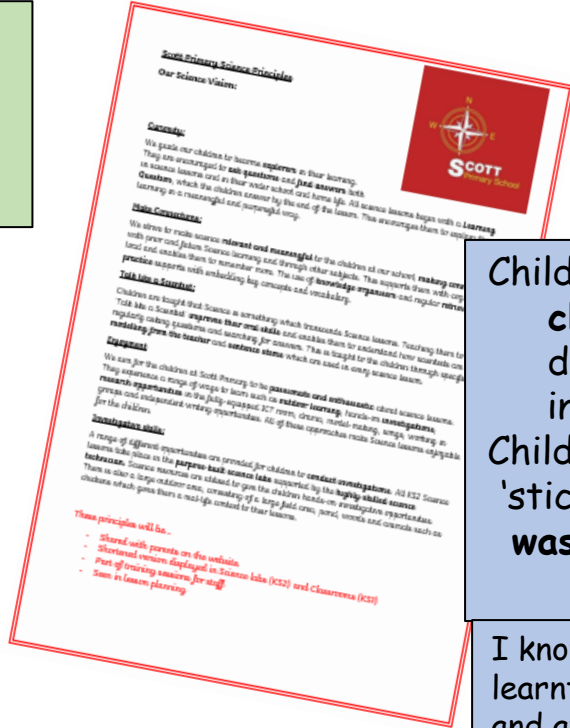
Reflection

Science Displays

We did not know the views of the pupils at this point. We needed to find out what they wanted for science.

New vision shared with parents and staff and outlines the aims of Science at Scott.

It was important to get the voice of the pupils at this stage as we wanted to make sure that they were part of the journey throughout. **It makes the whole process a collaboration of all stakeholders.**



Opportunities to share diverse scientists and science stories in the news. Sticky knowledge displayed and referred to in lesson. This is part of our vision for science.

Children see science beyond the classroom and learn about diverse scientists thereby increasing their ambitions. Children remember more through 'sticky knowledge' displays. This was seen in pupil voice in the summer term.

I know I can remember what we have learnt before by looking at displays and at knowledge organisers in my book. - Year 4 child

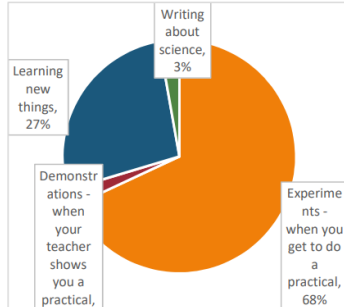


The views of the children were considered when the vision was implemented. They wanted more experiments, outdoor learning and trips. This then became part of our vision and principles and plan for staff development. There have been three staff training sessions with further ones scheduled for next academic year focussing on embedding enquiry skills, outdoor learning & assessment.

What do you enjoy the most about science?

Experiments - when you get to do a practical	147
Demonstrations - when your teacher shows you a practical	5
Learning new things	58
Writing about science	6

25 Y4's were predominantly interested in Learning new things



What would make science even better at school?

Free text responses that have been coded

More experiments / Use equipment - microscopes, bunsen burners	115
More science - chemistry, biology / More lessons - time in lab	23
More trips / More visitors	20
More learning outside - in the woods, fire	17
Competitions / Clubs	4
Less writing / No writing	7
More drawing	3
More writing	1

SL/B: Science subject leadership is strengthened and developed through strategic support enabling improvement to take place

Pre-PSQM

During PSQM

Impact

Reflection

New science leader took over the role in September. The subject had been neglected somewhat due to lockdown. Science labs were not in use, classes were in bubbles, no opportunities for visitors etc. As Covid subsided, it was clear that there were gaps in science that needed to be focussed on: scientific enquiry, assessment, outdoor learning, wider opportunities etc. It was clear that regular meetings and non-contact time was necessary to have an impact on science teaching and learning.

The science subject leader has been given regular release time to monitor the impact of initiatives. Regular meetings take place with SLT and the headteacher to discuss next steps. The subject leader writes a report to governors every term keeping them abreast of changes and the impact these are having on the children. The report also details the result of monitoring and next steps as a result.

SL attended various training sessions: PSQM, Local networking session, STEM ambassador project.

These had a big impact on the knowledge and skills of the SL. This was then transferred to staff training through a number of sessions across the year. **The networking sessions were beneficial for gaining new ideas from others-an example of this is the use of symbols to represent each enquiry type, which has been introduced across the school.** The Stem ambassador project supported the training the SL gave staff on enquiry types.

Stem Ambassador experience at Scott Primary



Orna Webster
Nawal Fiaz

Impact:

Prior to the meeting Nawal, I asked the pupils the question 'What skills do scientists use?'. Their responses were as follows: Not being clumsy, Common sense, Teamwork, Hardworking, Patience, Co-operation and Intelligence.

Following the sessions with Nawal, I again asked the same question. These were their responses this time: Ability to share ideas, Inquisitive, Resilience, Enquiring, Good communicator and Perseverance.

It was clear from the sessions with Nawal, that they took on board that scientists had to be able to communicate their ideas with others in an effective way. They also recognised that a large part of the role of a scientist is to ask questions, strive to find the answers, but have the resilience to carry on or start again if you don't get the answers straight away.

With Nawal being a woman and from an Asian background, it was wonderful for the pupils to see her as a role model in science. It made science 'real' to them as they could see someone who perhaps looks like them or comes from the same background inspiring them to pursue a career in science. They were intrigued as to how she got into her job and what she studied at school and university to become qualified to do such a role. This was one of the most important benefits they got out of the stem ambassador project.

These are pictures of the pupils making their steady hand game following the lesson on conductors and insulators:



Comment from stem ambassador.

The students had to develop an understanding and were able to observe the use of electricity in the lab. **They were able to enquire regarding the laboratory and how electricity is vital to the important lab work.**

From that, they set up the experiment, testing which switch is the best conductor of electricity.

They asked lots of questions about the role of the scientist and she was able to ask them questions about their work in school, discussing the five enquiry types and what skills they would need to be able to carry out the investigation.

The SL attended lots of training sessions this year. The areas shared with staff were varied: Sentence stems, enquiry types, Explorify starters, PSTT assessment etc. Although the staff have been enthusiastic about these, it is still under development. E.g. staff are secure in their knowledge of enquiry types now, but have not fully started using enquiry symbols. The SL has been upskilled this year and is looking forward to continue monitoring and assessing the impact of what has been introduced this year.

SL/B: Science subject leadership is strengthened and developed through strategic support enabling improvement to take place

Pre-PSQM

During PSQM

Impact

Reflection

Regular meetings with SLT and HT to discuss steps forward and map out opportunities for monitoring. These discussions then guided next steps in the development of science across the school.


Termly reports were sent to governors before PSQM. It was clear from previous reports that science was not being driven effectively and that Science needed to be a key priority this year for the school. The PSQM was a perfect opportunity to reflect on current practice and decide key priorities for the year ahead.

Termly science report to governors and HT.

The governors and HT are aware of all initiatives this year and are keen to question to impact of these.

The impact of training this year can be clearly seen in the Target tracker data. Staff are clearly more confident with their judgements now.

Subject Term Report Produced By:
O. Webster – Science
Date: 29.04.2022



Actions taken:

- PSQM still in progress – paperwork up to date so far.
- OW attended training session in February. This covered the next steps in the award, including how to document and evidence the impact on the school. This involves creating a 22-slide PowerPoint which demonstrates what we have achieved this year and how we have evidenced the impact. This will be finalised by the deadline in June. There is another training session at the end of April which will support in how to complete this PowerPoint.
- Staff meeting delivered in March by OW, which covered the five enquiry types. These are being used in lessons but are not being made explicit to the children. This was picked up in the book look in April for staff to make it explicit in success criteria by highlighting the enquiry type in bold.
- Book looks this term revealed that all year groups are using knowledge organisers and sticking them in books. Having looked at planning, these are also being referred to regularly in lessons such as through quizzes, vocabulary sorting activities etc.
- OW completed the stem ambassador programme, which involved having a science expert delivering online sessions to Year 6. OW then had to write up a report related to this programme. The school received £250 for this which will go towards science resources.
- Science week took place in March. There were various activities taking place that week:
 - Year 5/6 Pupil Premium trip to Bedford School Observatory – This was an opportunity for PP children to go star gazing. They got a lot out of this trip and were able to share their learning with the rest of their class.
 - Science Fair – Year 5 and 6 pupils delivered a science fair to the rest of the school over the course of the week. This involved demonstrating different experiments to the younger children. The year 5/6 pupils were excellent at communicating with the children and were able to ask them challenging scientific questions. This was a wonderful opportunity for the children to get together again after being separated for so long. Both the Year 5/6 scientists and the younger pupils benefited greatly and it raised the profile of science across the school.
 - Visiting scientist, Alan Coughlin, spent the week in school delivering lessons along with JJ.
 - The whole school focus was 'observation over time' and each year group used this theme to observe changes over a period of time. Examples include growing cress, growing mould on bread, observing shadows over the course of the day etc. This was an opportunity for the whole school to focus on one particular enquiry type.
- Year 5/6 Science ambassadors recruited to support the delivery and promotion of science across the school.
- Science displays in both halls – make science more visual outside of the science labs.

Impact of Actions taken:

Science

- Science week was beneficial for the whole school as we all focussed on the same enquiry type. Parents and children were invited to conduct a science experiment at home and send their 'science selfie' in. These are all on display. The impact of this is that it enables the parents to get involved with science and shows the children that science doesn't just take place in a science lab.
- The science displays show diverse scientists and science in the news. These are in both halls and again is an opportunity for the children to have high aspirations and to see science beyond the classroom.
- Following the staff meeting, staff are more confident with the five enquiry types and are aware that they need to share them with the children and make each enquiry explicit in each lesson. The children can now see not just the knowledge they are learning but what skills they are using.

Target Tracker Data:

Year group	Attainment Autumn	Attainment Summer
Year 1	65% EXS	76% EXS
Year 2	67.1% EXS	75% EXS
Year 3	58% EXS	81.3% EXS
Year 4	55% EXS	71% EXS
Year 5	60% EXS	77% EXS
Year 6	59.6% EXS	76% EXS

It is clear staff are more secure in their judgments since staff training has been put in place. They are using cold/hot tasks and KWL grids to assess knowledge learned and are using TAPS assessments to assess working scientifically skills.

Next Steps:

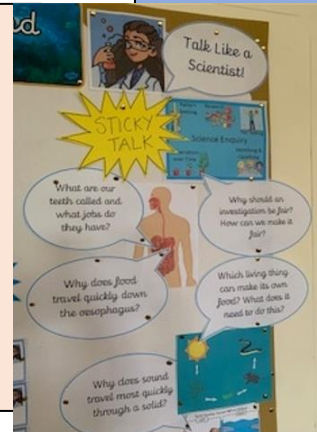
- Continue with gathering evidence for PSQM. This will need to be completed and submitted by mid-June.
- Staff meeting to talk about Outdoor Learning and Talk like a Scientist in May.
- Conduct learning walks to see if the new initiatives have been implemented correctly.
- OW/ SW to attend PSQM sessions in April and May.
- Monthly science experiment to be sent home by JJ (home/school link)

Talk like a scientist

The impact of these meetings with the Artsmark lead is that children are now aware of the questions they should be asking and what key vocabulary they should be using. This is beginning to be seen in their science writing, although is still not embedded.



Talk Like a Scientist
Meetings were held with the lead for Artsmark on how we can develop oracy through science. This was called 'Talk like a Scientist'. Sentence stems were developed for use in lessons. An avatar was produced to represent a scientist.

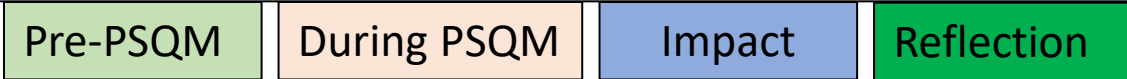


The headteacher and governors have been very supportive throughout the whole process this year. I have been given the time to plan, implement new initiatives and monitor the impact. I have attended training sessions, many of which have been transferred into staff training. The termly reports to governors are a perfect way to assess where we are with the journey, any impact and next steps. Next year will be focussed on embedding new initiatives introduced this year and continue to attend any training sessions followed up by science fair. It has been great to have all stakeholders on board with a common goal of improving the subject.

Sentence Stems for Science

Key Stage	Predicting	Visualizing	Observing	Summarizing	Connecting	Concluding	Reflecting
KS1	I think ... I think ... means ... The first step is ... The next step is ...	The picture reminds me of ... I drew a ... I can describe ... by drawing a ... The symbol for ... is ...	I see ... I see ... when I ... I hear ... I hear ... when I ...	I think they are the same because ... I think they are different because ... A similarity is ... A difference is ...	A ... is a type of means the same as ... I heard ... I saw ...	The answer is ... I remember ... I learned ...	I think ... I noticed ... I was surprised that ... I still want to know ... I'm familiar with ...
KS2	I think that ... because ... I predict that ... because ... Overall, our objective is ... We began the experiment by ... The initial step is ...	The model shows ... A ... can be represented with ... I can draw ... to represent a ... Another word for ... is ...	I observed ... I noticed ... The pattern I noticed is ... I can tell ... apart from ... When I hear ... it tells me ...	The similarities between ... and ... are ... The differences between ... and ... are ... The graph describes ... An example of a ... is ... Our data shows ...	The effect of ... was ... This reminds me of is the same as ... because they are both is different from ... because ...	My conclusion is ... because ... The experiment helped me understand ... I conclude ... It appears ... The best explanation is can be used in real life to ... I notice ... I was surprised that ... I still want to know ... I'm familiar with ...

SL/C: Science subject leadership is strengthened and developed through an effective monitoring & improvement cycle that informs development in science



There has always been a rigorous monitoring cycle when it comes to science. Covid impacted this somewhat so the cycle was introduced again this year.

Book looks are completed termly as a group. The focus is the action points from previous book looks and to identify the implementation of staff training.

The results of book looks are shared with the HT and governors in the termly subject report. **They are fully aware of what has been implemented and the impact which can be seen in lessons and books.**

Pupil voice was conducted in the autumn term to gauge the views of the pupils. This was then followed up in the summer term to see impact. In the autumn term, the main priority for the pupils was to have more investigations, trips and outdoor learning. The summer term pupil voice was in person rather than a questionnaire.

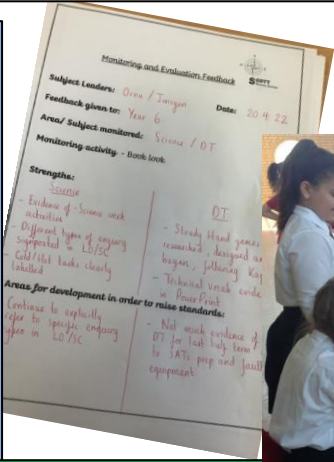
Autumn Term

What would make science even better at school?

Free text responses that have been coded

More experiments / Use equipment - microscopes, bunsen burners	115
More science - chemistry, biology / More lessons - time in lab	23
More trips / More visitors	20
More learning outside - in the woods, fire	17
Competitions / Clubs	4
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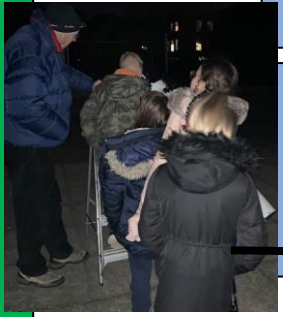
The impact of cold/hot tasks was clearly seen in books. **The progress from the beginning to the end of the topic is clear. The learning that has taken place is evident.** Learning questions have also had an impact on what the children are writing in their books. **They are thinking deeply about what they are learning. This was evidenced in the books.**



Summer term pupil voice:
"We have done lots of experiments this year. I really enjoyed using the electrical equipment, especially when the teacher didn't tell us anything and we had to figure out for ourselves how to light the bulb"- Year 4 child.

"I liked when the big children showed us some experiments in the hall (during Science week). They knew lots of science. I really liked the experiment with the candle. We had to guess if it would go out or not." Year 1 child.

"I was really happy when I got to go to the observatory at Bedford School. It was exciting as it was at night. It was such a clear night and we saw so many stars in the huge telescopes. It was scary when I had to tell my class about what I had learnt, but it was OK in the end because I remembered lots of facts." Year 5 child.



Book monitoring identified that staff are implementing what has been introduced this year, such as learning questions, scientific enquiry symbols, use of Explorify, more independent opportunities for investigations etc. Although scientific enquiry is a big focus, it will take a while for the children to become familiar with the symbols and to recognise for themselves which enquiry types they are doing. I feel proud that the staff have taken everything on board this year and I can already see the impact it is having on staff confidence, lesson content and pupil progress.

SL/C: Science subject leadership is strengthened and developed through an effective monitoring & improvement cycle that informs development in science

Pre-PSQM

During PSQM

Impact

Reflection

Lesson observations had been put on hold during Covid. It was clear that science labs were not being used effectively. Based on lesson plan monitoring, many of the lessons were knowledge-based rather than skills based. Working scientifically became a main development for the year.

Science displays have been updated in classrooms and corridors with a focus on Scientific enquiry. Lesson monitoring shows that these are being referred to in lessons by not only the teacher, but also the children. This is making the children think in a more scientific way and they are asking more open-ended questions of each other.

Observation of lessons-Summer term
Evidence suggests a significant increase in pupil-led independent scientific enquiry. The science labs are being used for all science lessons. Range of scientific equipment is being used effectively such as this electrical equipment. Teachers are creating opportunities to ask the children which enquiry skill they are developing in that lesson and use the symbols to guide them. **The children are more independent than at the beginning the year, often conducting investigations with very little input from the teacher.**

Lesson observations were undertaken in Autumn and Summer term. In Autumn term, many of the lessons were knowledge-based, which were effective, however there was not enough opportunity for independent investigation skills to be developed. A focus for staff training for the year has been developing enquiry skills through the use of learning questions, Explorify starters and using PSTT assessment opportunities for scientific enquiry in order to be more confident with teacher assessment judgements.

Year 4 cold task – how can you make the bulb light up?
 No prior teaching.

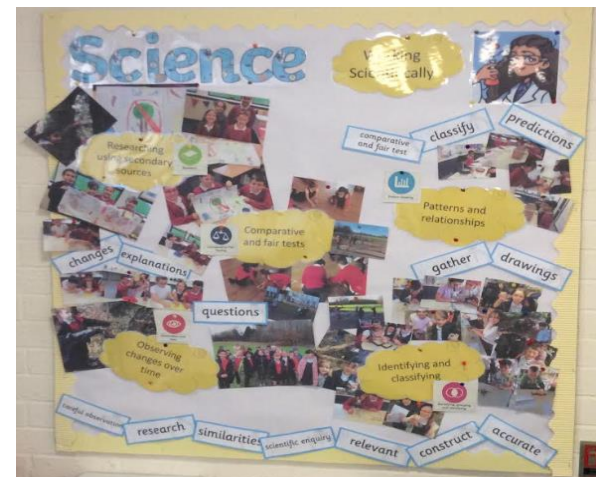


Comparative/ Fair Testing

The impact of staff training can clearly be seen in learning walks and pupil voice. It has been lovely to see the children being more independent and having opportunities to lead investigations. The focus has been shifted from mainly knowledge based learning to a mixture of both knowledge and skill. This will continue to be monitored next year.

Why is it so dim? I've got an idea - Maybe we need more batteries.

The metal parts make the light bulb work. They are all connected in a big circle. It gets brighter because it's got more electricity.



ST/A: Science teaching is strengthened and developed through engagement with professional development

Pre-PSQM

During PSQM

Impact

Reflection

Scientist Avatar Created as part of the *Aspire to Be ...* project.

Range of websites shared with staff. These are being used as starters, to aid planning or for support with assessment.



We have been using the starters from Explorify at the beginning of each lesson, The children are able to ask intriguing questions and explore their knowledge further.
Year 5 teacher

Staff audit suggested that teachers wanted more opportunities to use resources in the science lab, wanted support with assessment and the five enquiry types.

Staff have attended termly science staff meetings. These have been interactive with opportunities for discussion and teamwork.



Staff Meetings Focused on:
 Science Vision
 Use of Explorify
 Scientific Enquiry Types
 Lab Equipment Training
 Science Vocabulary and Sentence Stem Progression
 Outdoor Learning
 Learning Challenge Questions

Learning questions are evidenced in books and **scientific enquiry symbols** are displayed on all science displays and next to the learning question.

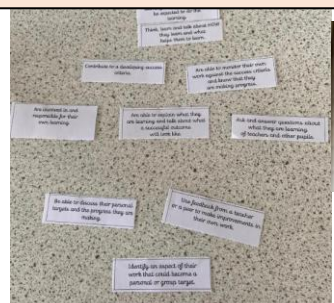
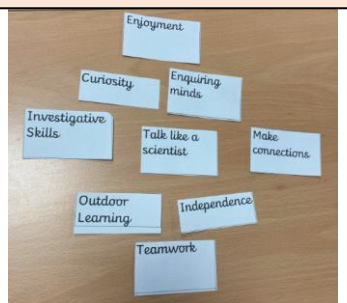


The staff have received a lot of CPD this year, which they have taken on board very well. I feel that many of the new initiatives need to be embedded fully over the course of next year.

- Embed the use of Sentence Stems and Talk a Scientist across the curriculum.
- Publish Science Vision on new school website and ensure it is displayed in all classrooms from September.
- Continue Lab equipment training to include use of Bunsen Burners and chemicals as requested by staff.
- Continue to monitor Outdoor Learning and its impact on the teaching and learning of Science.
- Monitor impact of enquiry types in lessons.

I have made great gains this year and feel that despite not everything being embedded fully, the profile of science has increased and science skills are at the forefront of the minds of staff when planning engaging lessons.

Diamond nine activities were used to create the vision and also to prioritise opportunities to assess the pupils.



Learning Objective	Success Criteria	Pupil	Teacher	Presentations
How does light travel when reflected?	<ul style="list-style-type: none"> I understand that light travels in straight lines. I recognise how light travels when reflected against a surface. I can use my understanding of reflection to create a working periscope. 			
Learning Question: How does light travel when reflected?				

ST/A: Science teaching is strengthened and developed through engagement with professional development

Pre-PSQM

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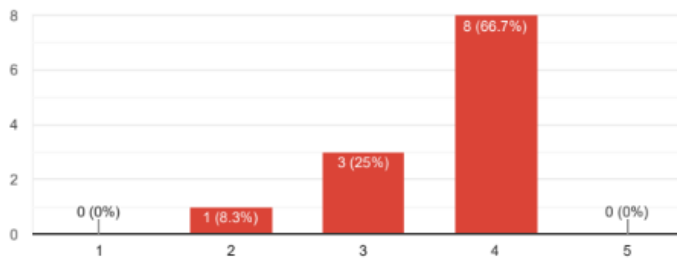
Reflection

When we conducted a staff audit in the autumn term some of the key findings were that teachers needed more CPD to support with working scientifically skills. They also were not confident with assessing science skills.

Scientific enquiry symbols. These were shared with staff in training. They are starting with sharing them in each lesson. Then the children will suggest which enquiry type they think they are using this lesson. This will then lead on to children drawing the symbols in the books themselves.

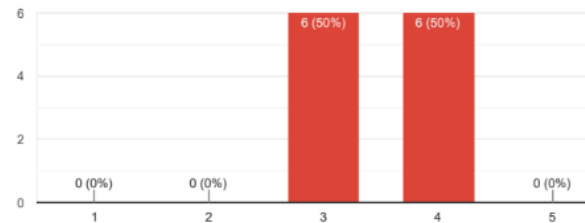
I feel I would benefit from additional science CPD

12 responses



I am confident in accurately assessing the children in Working Scientifically.

12 responses



The science training this year has given us some fresh ideas for planning and enforced the importance of the different Scientific areas. - Year 2 teacher

I found the last science session in the lab most helpful. I now have a really good idea of all the resources we have and how they can be utilised in our topics. - Year 4 teacher

We have found the five enquiry types training very useful and think it will help the children with their learning - particularly as it is visual and practical. - Year 1 teacher

The most useful thing I have found is the use of learning questions. I think the children really enjoy being able to answer the question at the end of the lesson and they like to take on the role of the teacher to explain the question to children that may have not understood fully. - Year 5 teacher

The most useful training this year for me has been the different science texts that link with our topics. It has been helpful for cross-curricular learning. - Year 3 teacher

ST/B: Science teaching is strengthened and developed through the use of a range of effective teaching and learning strategies

Pre-PSQM During PSQM Impact Reflection

Sentence Stems and Talk Like a Scientist



The science curriculum was focussed on knowledge learning rather than skills based. This was a focus this year.,



Plan and teach inclusive lessons where all learners are supported and challenged through the use of word mats, visuals, writing frames.

Sentence stems were introduced to staff. They use these to generate discussions

A range of teaching strategies were introduced:
 Starters to engage Learning questions
 Using knowledge organisers to help retain knowledge.
 Five enquiry types.
 Talk like a scientist

*It shows me what I will learn.
 Year 1 Pupil*

Knowledge Organisers shared at the beginning of topics and throughout.

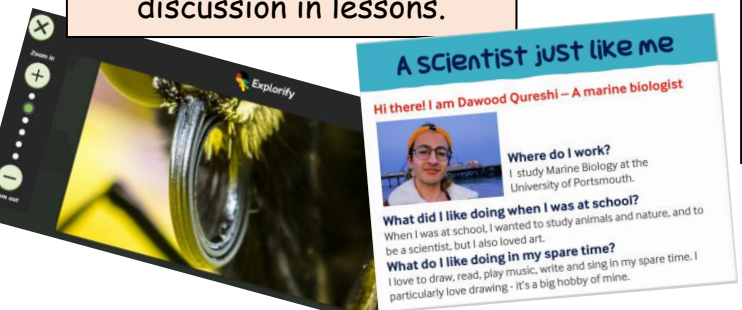
*The organisers help me to remember what I have learned and what I might learn next.
 Year 5 Pupil*

Using the lab effectively.
 Staff were given training on the resources in the lab and are now using the equipment in the lab to conduct investigations.

Sentence Stems for Science

Key Stage	Predicting	Visualizing	Observing	Summarizing	Connecting	Concluding	Reflecting	
KS1	I think ... means ... The first step is ... The next step is ...	The picture reminds me of ... I draw a ... I can describe ... by drawing a ... The symbol for ... is ...	I see ... I see ... when I ... I hear ... I hear ... when I ...	I think they are the same because ... I think they are different because ... A similarity is ... A difference is ...	A ... is a type of means the same as ... I remember ...	The pattern is ... I heard ... I saw ...	The answer is ... I know ... I learned ...	
KS2	I think that ... because ... I predict that ... because ... Overall, our objectives ... We began the experiment by ... The initial step is ...	The model shows ... A ... can be represented with ... I can draw a ... to represent ... Another word for ... is ...	I observed ... I noticed ... The pattern I noticed ... I can tell ... apart from ... When I hear ... it tells me ...	The similarities between ... and ... are ... The differences between ... and ... are ... The graph describes ... An example of ... is ... Our data shows ...	The effect of ... was ... This reminds me of is the same as ... because they are both ... It is different from ... because ...	My conclusion is ... because ... I notice ... I conclude ... It appears ... The best explanation is ...	I can be used in real life to ... The experiment helped me understand ... I was surprised that ... I still want to know ... I'm familiar with ...	

Interactive resources from Explorify are used to generate scientific discussion in lessons.



Learning questions. "I think the children really enjoy being able to answer the question at the end of the lesson and they like to take on the role of the teacher to explain the question to children that may have not understood fully." Year 5 teacher.



ST/B: Science teaching is strengthened and developed through the use of a range of effective teaching and learning strategies

Pre-PSQM During PSQM Impact Reflection

There was not an effective assessment process in place. Learning objectives were being used but the children were not always paying attention to them when thinking about what they have learnt in the lesson.

Learning questions are used in every lesson.

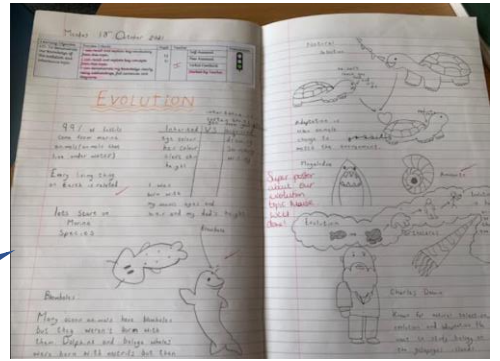
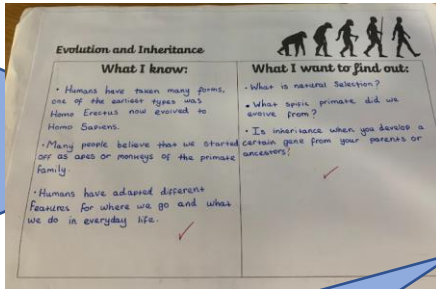
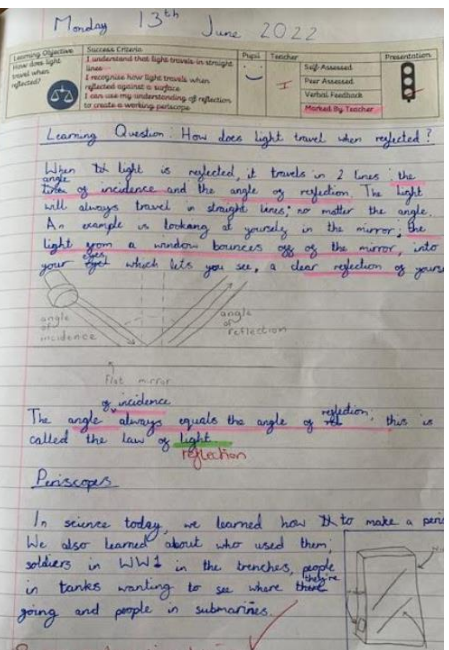
Learning Questions were introduced to give the children an opportunity to really reflect on their learning from each lesson. They had to think about what they gained from the lesson whether it be new knowledge or new skills.

Learning questions. "I think the children really enjoy being able to answer the question at the end of the lesson and they like to take on the role of the teacher to explain the question to children that may have not understood fully." Year 5 teacher.

The learning questions get them thinking and the children are able to answer this by the end of the lesson. They are able to explore and give their own ideas and thoughts. They also make their own predictions at the beginning of the lesson. Year 1 teacher

I enjoy doing double page spreads at the end of the topic as I can show off what I have learnt. I try to use most of the key vocabulary and the sentence stems in my work. Year 6 child.

Cold/Hot tasks and KWL grids aid teacher assessment. The teachers use the cold tasks to assess prior knowledge, identify misconceptions and plan the unit based on their responses.



Teachers have been upskilled this year and are now using a different range of teaching strategies to ensure all pupils are accessing the learning. They are assessing them more confidently and are conducting investigations more frequently. It is important that we continue to drive these new teaching strategies forward next year and that they become embedded in everyday teaching. My action plan this year has been ambitious and next year's will be just as ambitious with the focus on embedding initiatives from this year and most importantly monitoring the impact on staff and pupils.

ST/C: Science teaching is strengthened and developed through regular and safe use of up-to-date quality resources

Pre-PSQM

During PSQM

Impact

Reflection

Teachers had access to resources but the staff audit showed that the majority of staff needed further support with training on how to use the equipment safely. They also wanted a list of what we had available to us and where to use it in the Science topics.

During a staff meeting, staff were given a range of websites which can support with their teaching. Interactive resources from Explorify are now used to generate scientific discussion in lessons.

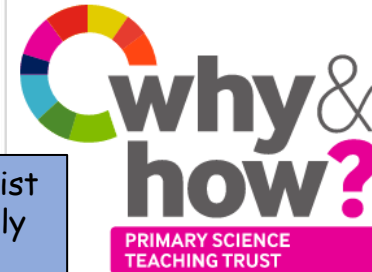


ODD ONE OUT

Shine a light

Year 5 – 6

Light



That Science Lady

- Primary Science Support & CPD -

A Scientist just like me

Hi there! I am Dawood Qureshi – A marine biologist



Where do I work?
I study Marine Biology at the University of Portsmouth.

What did I like doing when I was at school?
When I was at school, I wanted to study animals and nature, and to be a scientist, but I also loved art.

"I find Explorify great for generating discussion. It can be used as a hook to engage the children at the beginning of the lesson." Year 4 teacher.

"I would like to be a scientist when I'm older, so its really good to see what jobs scientists do and how they got into their job." Year 5 child.

We have a lab technician on site who is a qualified scientist. Her role was somewhat impacted by Covid as it was tricky for her to be in all classes.

We reintroduced her role to the children and she is part of most science lessons across the school. She is a fantastic resource as she has a wealth of knowledge and supports the teachers with planning and resources.

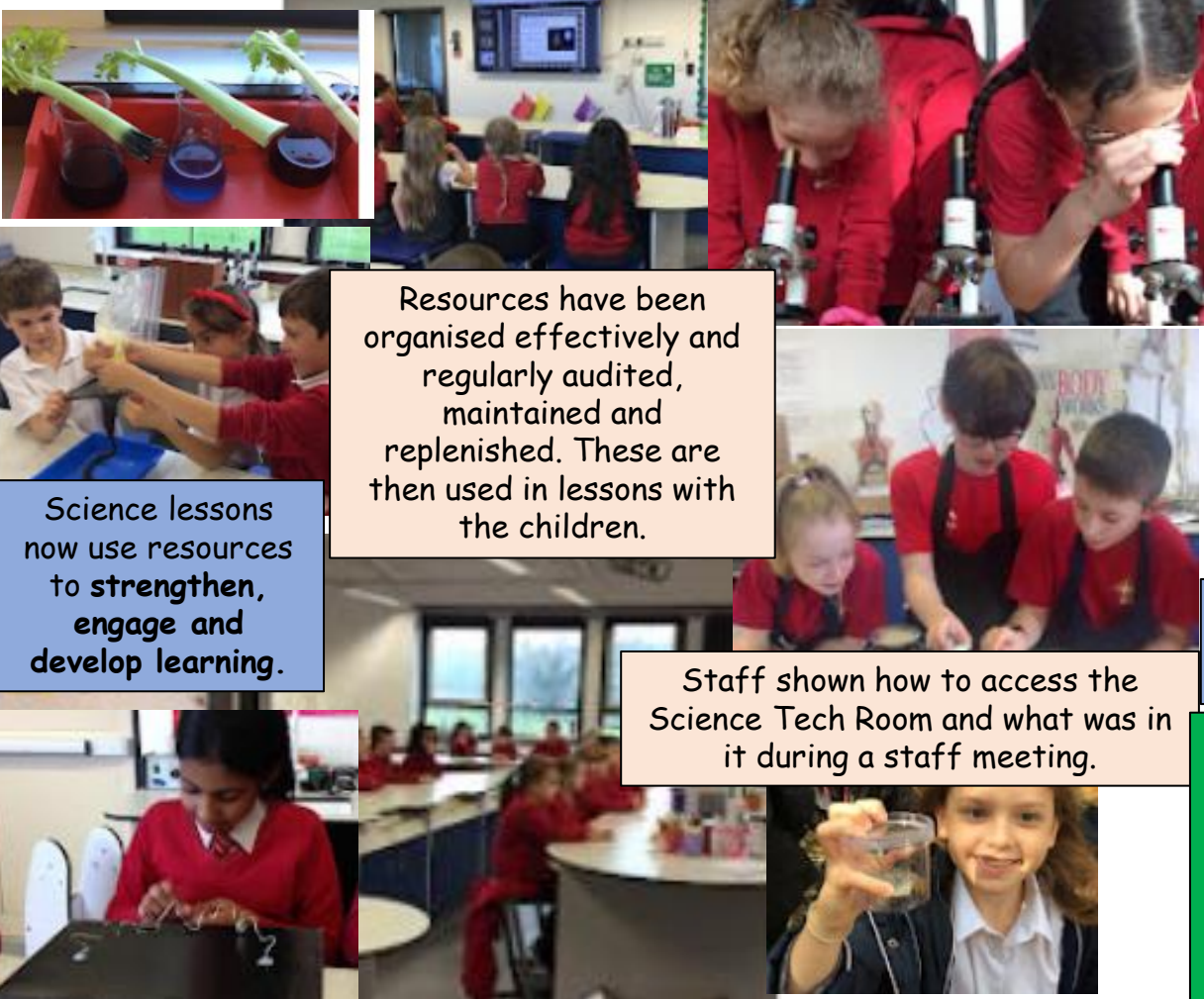
For many children, it is fascinating to have a qualified scientist in lessons. They often ask her questions and she has delivered sessions across the school explaining how she became a scientist and what her interests were as a child. This is definitely increasing their aspirations.

Staff use the resources more frequently as they now know what we have and where resources are. The websites are being used effectively. The next step is embedding the use of PSTT assessments (This was training delivered in summer term). Further training to be given on more specialised resources such as Bunsen burners and chemicals. Consider purchasing Playtime Science Kits. This can be lead by the science ambassadors, which will develop their roles. They have done a great job this year and it was such a proud moment watching them deliver science sessions to the young pupils during science week, asking probing questions of them. I look forward to developing their roles next year.

Resources have been organised effectively and regularly audited, maintained and replenished. These are then used in lessons with the children.

Science lessons now use resources to strengthen, engage and develop learning.

Staff shown how to access the Science Tech Room and what was in it during a staff meeting.



ST/C: Science teaching is strengthened and developed through regular and safe use of up-to-date quality resources

Pre-PSQM During PSQM Impact Reflection

Teachers were looking for high-quality diverse texts to support with their teaching. It was also important that we reinforce cross-curricular teaching this year using texts, the environment and resources which can link subjects.

Staff informed of books linked to topics.

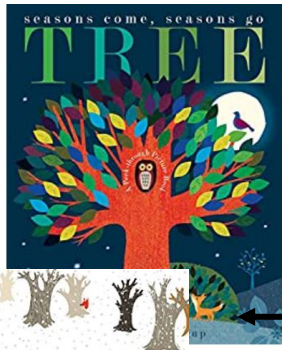
A list of topic books was collated for year group and books ordered for the Summer Term.

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 they hunt? What is 'dark'? Can you explain why Plop needsn'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?

Other Related Stories:
 Keesha's Bright Idea—Eleanor May
 The Firework Maker's Daughter—Philip Pullman
 The Darkest Dark—Chris Hadfield
 Orion and the Dark—Emma Yarlett

That Science Lady—Kathryn Horan
k.horan@outlook.com



"The children particularly enjoyed the book about seasons. We used this to talk about the weather, growing and seasons. The children then went outside and looked for the signs of spring."
Reception Teacher



Children make links between Science and real world.

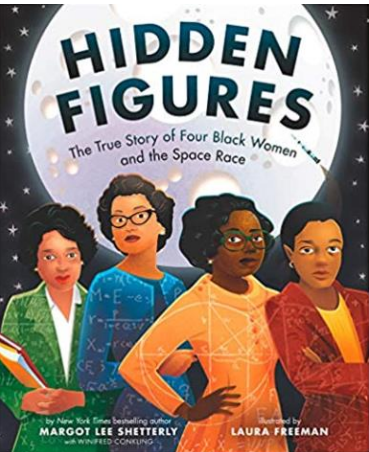
Use of School Grounds incl. woods, which are on-site.

Children recognise Science doesn't just happen in inside the school building.

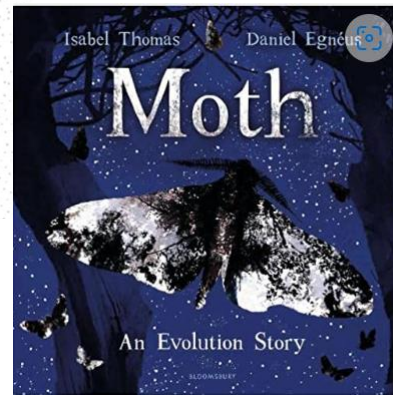
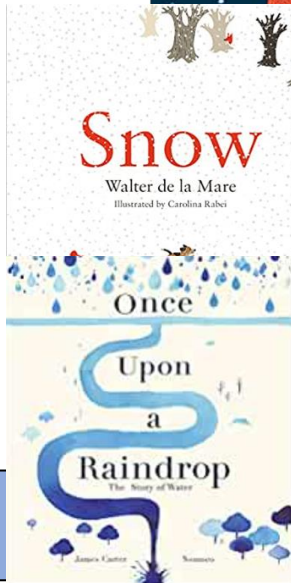


"We went to the woods to look for minibeasts that live there. I really liked picking up logs and seeing what was underneath. It was interesting to see what their habitats are. I love going to the woods. It makes me feel free!" Year 2 child.

The texts are being used regularly either in science lessons or as an end of day story. It is important that they do not see the 'Science books' as books that can only be read as part of the science lesson. We would like to embed the fact that science is all around us in everyday life. The plan is for staff to increase their outdoor learning, making full use of the outside space. A plan has been drawn up for outdoor learning for next year which links to their topics.



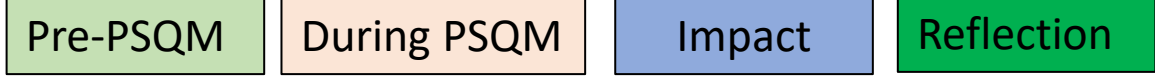
Links to Literacy strengthened.



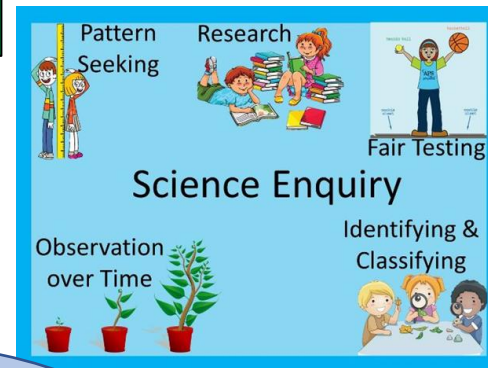
"I liked reading Moth together as a class. It made it obvious to me how evolution is all about survival of the animals that are adapted best to their environment."
Year 6 child.

Reception	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Seasonal Changes, Sounds Walks, Scavenger Hunts, Making rainbows, Barefoot Safari, Camouflage Caterpillars, Living books, natural phonics.					
Year 1	Victorian Toys Tipi for Teddy, Ready, Teddy, Go.	Dinosaurs Scale Dinosaurs.	Around the World Bird Surveys, Cloud Gazing, Planet Plays	Africa Create a critter - Modelling and choosing a habitat.	Bedford Castle Miniature models of a castle - use small world figures, Infant weaponry.	Wild and Wonderful Animal Seed Disposal game.
Year 2	Great Fire of London Create a fire display (with autumn leaves).	Frozen Planet Winter walk / expedition. What do we need to take with us? Sledges.	Victorian Schools Victorian children's games (in the woods!).	Twisted Tales Fairy Gardens Sticky Crowns. Magic Wands. Magic potions.	Superheroes Team Missions! Can they overcome the natural obstacle and save the hidden toy from the baddie?	Beside the Seaside A beach day (by the stream). Mud castles.

SL/A: Science learning is strengthened and developed through a shared understanding of the purposes and process of science enquiry



Children were not very independent in science lessons and wanted more investigations (This was seen in the pupil questionnaire). This may have been due to lack of subject knowledge from teachers (This was seen in the staff questionnaire). A plan was put in place to train staff on the science enquiry types and working scientifically assessment to ensure that staff are confident with both. This was to be done gradually across the year.



- March staff meeting:**
- Go through the 5 enquiry types in more detail.
 - Share suggested investigations to complete in year groups. Staff to decide which investigations match their topics and plan for the upcoming topics.
 - Share plan for Science week.

- November staff meeting:**
- Use of Explorify for science starters including 'A Scientist just like me'.
 - Share knowledge matrices with staff discussing different enquiries for each topic; misconceptions; and prior and future learning.
 - Suggestions for investigations answering the big question.

Starter
A Scientist just like me



Dr Kelsey Byers
Evolutionary Biologist

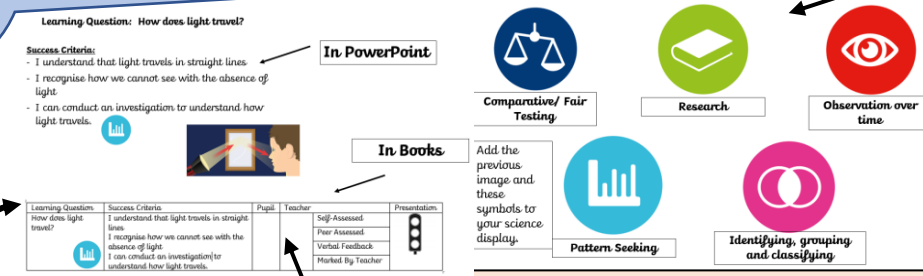
I have added the symbols to my working wall and at the start of each ppt for next half term so that the children know which one we are looking at. I am definitely more confident with using them now.
Year 4 teacher

How does the digestive system work?

How can I make the bulb light?



5 enquiry types symbols - to be displayed in lesson PPTs, books and working walls.



- May staff meeting:**
- Monitoring of books and lessons picked up that staff were incorporating the five enquiry types but were not making them explicit in lessons.
 - Symbols were introduced to use in all lessons and to be displayed on science working walls.
 - PSTT Plan resources shared to support with assessment.

Asking Questions
Asking questions that can be answered using a scientific enquiry

- Questions children may ask:
- What features do animals living at the North Pole have? Children might use books, websites or watch videos to find out (Researching using Secondary Sources).
 - Do all flowers have five petals? Children may suggest carrying out a survey of flowers in the school grounds (Pattern Seeking).
 - Which shoes have most grip? Children could investigate the forces needed to pull shoes across different surfaces (Comparative and Fair Testing).
 - When is the bulb brightest? Children could investigate the effect of changing the number of batteries or the thickness / length of the wire in their circuit (Comparative and Fair Testing).

Year 1 (KS1 skills)	Year 2 (KS1 skills)	Year 3 (Lower KS2 skills)	Year 4 (Lower KS2 skills)	Year 5 (Upper KS2 skills)	Year 6 (Upper KS2 skills)
Working Scientifically To use the following practical scientific methods, processes, and skills with increasing confidence	To use the following practical scientific methods, processes, and skills with increasing confidence	To use the following practical scientific methods, processes, and skills	To use the following practical scientific methods, processes, and skills	To use the following practical scientific methods, processes, and skills	To use the following practical scientific methods, processes, and skills
Questioning, Enquiring & Planning Ask simple questions about the world around us. Begin to recognize that questions can be answered in different ways (different types of enquiries including: observing changes over time,	Ask questions about the world around us. Recognize that questions can be answered in different ways (different types of enquiries including: observing changes over time,	Ask some relevant questions and use different types of scientific enquiries to answer them. Begin to explore everyday phenomena and the relationships between	Ask relevant questions and use different types of scientific enquiries to answer them. Explore everyday phenomena and the relationships between living things and familiar	Begin to plan different types of scientific enquiries to answer questions, including recognizing and controlling variables where necessary. Begin to explore and talk	Plan different types of scientific enquiries to answer questions, including recognizing and controlling variables where necessary. Explore and talk about ideas, ask own questions

SL/A: Science learning is strengthened and developed through a shared understanding of the purposes and process of science enquiry

Pre-PSQM

During PSQM

Impact

Reflection

Following a staff questionnaire, it was clear that staff were not sure of the 5 enquiry types and how they can provide opportunities for them in their lessons. Staff were using learning objectives and success criteria in each lesson, which did not always link with what they want the children to discover and learn.

Learning Question is introduced. This ensures the children are thinking about the learning which is taking place in the lesson and are having to respond to it.

LQ: What materials are the best electrical conductors?

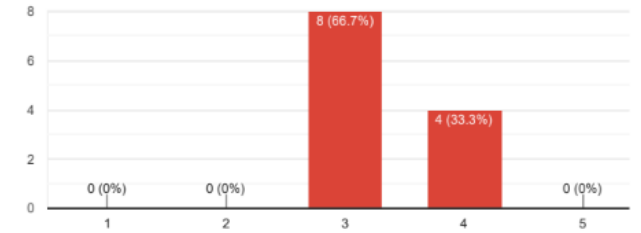
Success Criteria:

- I can explain what an electrical conductor is
- I can suggest materials which make good electrical conductors.
- I can conduct an investigation to find out if a material is a conductor of electricity (**Identifying, grouping and classifying**)

I really like having a learning question in science lessons. It makes me think about what I have learnt in the lesson. Year 3 child.

I am confident in enabling children to manage their own investigations and select their own equipment.

12 responses



Staff now have a shared understanding of science enquiry. I didn't want to introduce everything in one go, so they were introduced over a number of staff meetings. Staff are definitely more confident and are ensuring that the five enquiry types feature in the majority of science lessons. Symbols are beginning to be used to make the enquiry types explicit for the children. It was great to speak to pupils in lessons and ask them about the symbols. It is clear that they are more familiar with them now. I recognise that it is not fully embedded (i.e. they are not confident enough to draw their own symbols in books), however they are definitely on the journey to using them independently.

SL/B: Science learning is strengthened and developed through the purposes of science assessment and current best practice



There was no particular assessment strategy in place. Target tracker was being used but teachers lacked confidence in their judgements. Opportunities for scientific enquiry were limited. Although we have science labs and a large outdoor area, including woods, these were not being used regularly enough. This became a large focus during the PSQM journey.

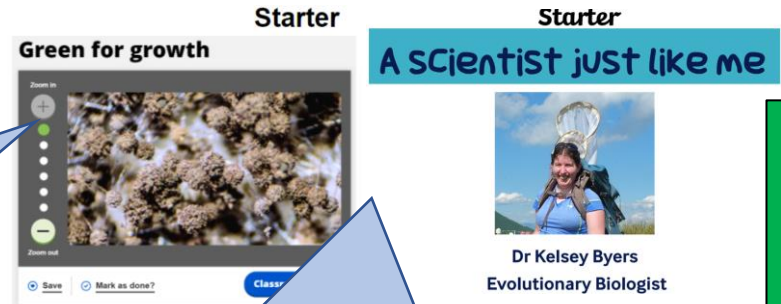
Science Starters used to ascertain prior knowledge and promote Scientific discussion using Explorify.

LQ: What materials are the best electrical conductors?
Success Criteria:
 -I can explain what an electrical conductor is
 -I can suggest materials which make good electrical conductors
 -I can conduct an investigation to find out if a material is a conductor of electricity (**Identifying, grouping and classifying**)

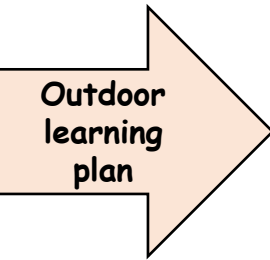
Staff training given about opportunities for cross-curricular outdoor learning. Each year group to do an outdoor learning session each half term.

The Explorify website has some great resources to illicit children's understanding before a session so you can pitch the learning at the right level. Year 5 Teacher

I like the odd one out tasks. Everyone can be right as long as you justify your answer with scientific evidence! Year 4 pupil



The teachers are far more confident in assessing both knowledge and skills of the children, using cold/ hot tasks and TAPS assessment documents. Science is more cross-curricular through star writer and range of texts given to each year group. Outdoor learning will be developed further next year as this is not yet consistent.



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	Seasonal Changes, Sounds Walks, Scavenger Hunts, Making rainbows, Barefoot Safari, Camouflage Caterpillars, Living books, natural phonics.					
Year 1	Victorian Toys Tipi for Teddy, Ready, Teddy, Go.	Dinosaurs Scale Dinosaurs.	Around the World Bird Surveys, Cloud Gazing, Planet Plays	Africa Create a critter - Modelling and choosing a habitat.	Bedford Castle Miniature models of a castle - use small world figures, Infant weaponry.	Wild and Wonderful Animal Seed Disposal game.
Year 2	Great Fire of London Create a fire display (with autumn leaves).	Frozen Planet Winter walk / expedition. What do we need to take with us? Sledges.	Victorian Schools Victorian children's games (in the woods!).	Twisted Tales Fairy Gardens, Sticky Crowns, Magic Wands, Magic potions.	Superheroes Team Missions! Can they overcome the natural obstacle and save the hidden toy from the baddie?	Beside the Seaside A beach day (by the stream). Mud castles.

Children see science beyond the classroom and gain confidence in the outdoors. **These opportunities link well in a cross-curricular manner, thereby allowing pupils to make links with their learning across subjects.**

SL/B: Science learning is strengthened and developed through the purposes of science assessment and current best practice

Pre-PSQM During PSQM Impact Reflection

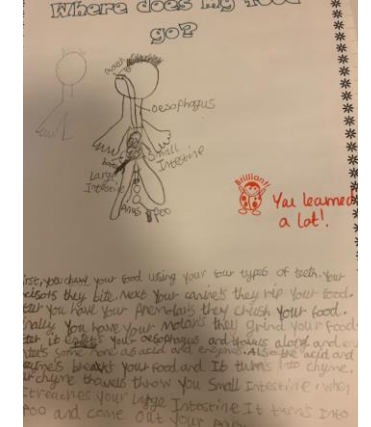
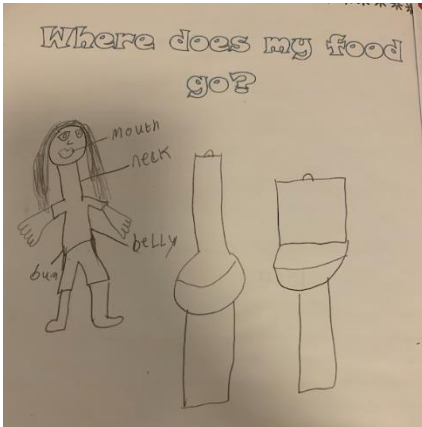
Cold and hot tasks implemented across the school to assess knowledge before a topic and at the end of a topic.

Progress in science was tracked across the school termly, however teachers were not fully confident in their judgements

When I looked at the most recent Target Tracker Data, it shows most children are making progress across the school in Science and teachers are more confident in their judgements. They have begun to use TAPS assessments in their most recent topic. Feedback from staff has suggested this is making them more confident in their judgements. I will continue to monitor the use of the assessments for each topic next year.

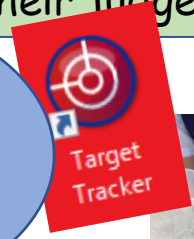
Before (Cold Task)

After (Hot Task)



Year 3/4 complete cold drawing/min d mapping tasks at the start of the topic and again at the end.

We have found the hot and cold tasks very beneficial as you can clearly see how much the children have learnt across the topic. The children enjoy creating double page spreads. Year 5 teacher



Staff training session in Spring to discuss how we know we are assessing accurately and what is the best way to assess skills and knowledge gained. The PSTT Plan documents were shared with staff in order for them to have better judgements in the children's Working Scientifically skills.

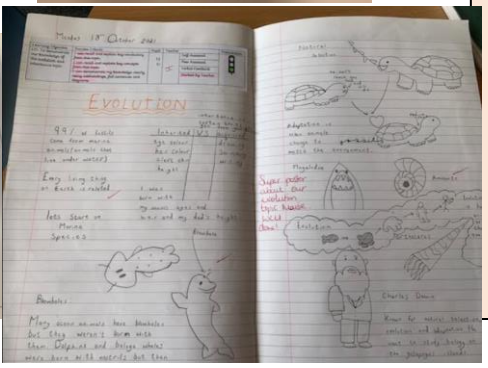
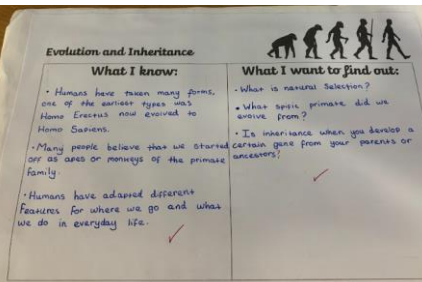
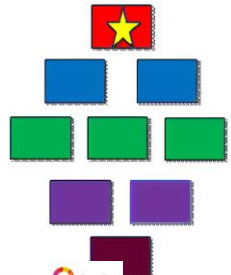
The PSTT assessment documents have been really useful to use to assess the pupils. We can also look at the assessment examples to make sure our judgements are accurate. Year 6 teacher

Teachers are more confident in assessing WS skills as well as knowledge. Pupils are given opportunities to conduct investigations to demonstrate their skills.

Diamond nine activity

Assessment for learning is working when...

Prioritise the statements.



Year 5/6 complete mindmaps at the start of topics and Double Page Spreads at the end.

Progress can clearly be seen between year groups and throughout topics.

Overview of TAPS plans for Focused Assessment of Working Scientifically

PLAN	ASK OR ASSESS	DO	OBSERVE / MEASURE	RECORD	INTERPRET / REPORT	REVIEW
1.1.1	Ask simple Qs and recognise that they are open-ended 'different ways'.	Perform simple tasks.	Observe closely, using simple observations.	Gather and record data to help in answering questions.	Identify and classify the appropriate scientific language to communicate skills.	Use their observations and data to suggest answers to questions.
1.1.2	Materials selection test.	Materials handling and string.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.3	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.4	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.5	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.6	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.7	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.8	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.9	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.10	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.11	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.12	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.13	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.14	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.15	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.16	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.17	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.18	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.19	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.
1.1.20	Materials selection test.	Materials selection test.	Plan, discuss and test.	Discuss, record and report.	Analyse the findings, animal identification.	Evaluate the findings, body parts.

*TAPS is a registered trademark of the Department of Education, Government of Western Australia. Progression statements are taken directly from England's 2014 National Curriculum, with small additions or omissions from the 2018 Teacher Assessment Framework.

SL/C: Science learning is strengthened and developed through the importance of and strategies for developing all children's science capital

Pre-PSQM

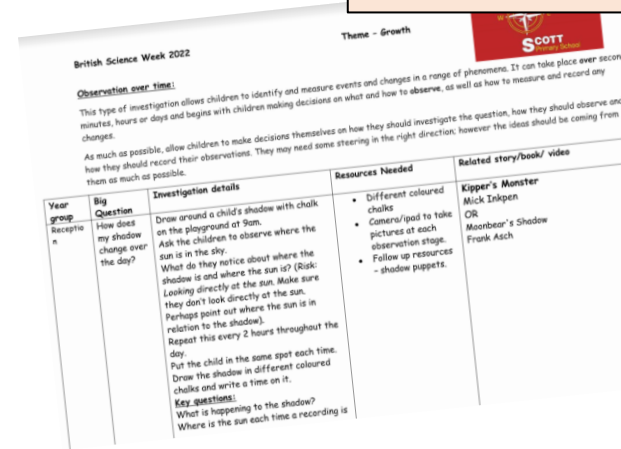
During PSQM

Impact

Reflection

Science week gave us an opportunity to develop scientific enquiry, engage all pupils in a common enquiry and develop the role of science ambassadors through coaching the younger children.

Since the pandemic, it has been important to ensure that all children are having scientific experiences that will not only engage and enthuse them but will also be inspired to follow a career in science. When we started the PSQM journey, we identified that perhaps we weren't making science all around us explicit. This was one of the aims this year - to make science accessible to all.



Time slots	Friday 11 th	Time slots	Monday 14 th	Time slots	Tuesday 15 th	Time slots	Wednesday 16 th	Time slots	Thursday 17 th
		08:45 - 09:00	Alan Cayless visiting Launch: Science Selfie Competition		Alan Cayless visiting		Alan Cayless visiting		
			Whole school observation over time experiments begins...						
09:30 - 10:10	Y3 PP students with STM in labs	09:00 - 10:00	Y1 Bumblebees class		Y5 Peake class		Y2 Owls class		
10:15 - 10:55	Y4 PP students with STM in labs	10:00 - 11:00			Y5 Amundsen class		Y2 Hedgehogs class		
11:00 - 11:40	Y3 PP students with STM in labs	11:00 - 12:00	Y4 Fossey class		Y1 Rabbits class		Y2 Badgers class		
11:40 - 12:20	Y6 PP students with STM in labs	12:30 - 13:00					Y3 & 4 Lunchtime Science Fair in Sports Hall (run by Y5/6)		
		13:00 - 13:30	Y1 Lunchtime Science Fair in Sports Hall (run by Y5/6)		Y2 Lunchtime Science Fair in Sports Hall (run by Y5/6)		Y3 & 4 Lunchtime Science Fair in Sports Hall (run by Y5/6)		
		13:10 - 14:10	Y4 Grylls class				Y5 & 6 Lunchtime Science Fair in Sports Hall (run by Y5/6)		
		13:30 - 14:30					Y3 Coleman class		
		14:10 - 15:10	Y4 Byrd class		Y6 Hillary class				
		14:30 - 15:30					Y3 MacArthur class		
		18:30 - 20:30	Year 5/6 visit to Bedford School Observatory (PP)		Y6 Fields class				Year 5/6 visit to Bedford School Observatory (PP)



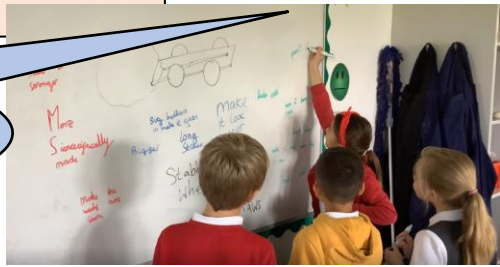
Science with Dr Jarvis (Day 2) - Reaction times. It would be lovely to see you conducting your experiment and for us to your results - post them...

Science videos put on social media by the science technician, giving opportunities for science at home.

Pupil Premium Pupils: We have engaged the PP children this year through a range of opportunities such as Observatory visit and a science visit from a local secondary school.

Higher Ability Pupils: We wanted to give the Higher ability pupils the opportunity to challenge their abilities through entering Stem competitions. Year 4 took part in a local competition at a secondary school and came second!

I can't believe we came second. We worked really well as a team. It was challenging but really good fun! Year 4 child.



It was such a clear night. The moon was really big through the telescope. Year 5 child

SL/C: Science learning is strengthened and developed through the importance of and strategies for developing all children's science capital

Pre-PSQM

During PSQM

Impact

Reflection

Robotics

Visiting scientist during science week

Year 3 geologist visit

Year 5 observatory visit



Microscopes during science week



The children have been given lots of opportunities this year to take part in science activities beyond the classroom. After so long of being stuck in bubbles, it has been wonderful to see them mixing and experiencing science in different ways. We are developing a new website which will go live in September. The old website limited what we could share with parents and the wider community this year. This new website will increase links with home. We will also be developing the social media presence to raise the profile of science within the local community.

Science ambassadors working hard during science week

All of these additional opportunities have been important to **generate enquiry skills and to increase science capital.**



SWO/A: Science is enriched by cross-curricular planning that links science to other areas of learning

Pre-PSQM

During PSQM

Impact

Reflection

Teachers planned Science lessons following the National Curriculum. Science was not always taught every week or in a cross curricular manner.

Topic	Year	Learning Objectives	Resources	Activities	Assessment
Animals including Reptiles	Year 3	Identify and name the main groups of animals.
...

I love going outdoors to learn because Science is all around us!
Year 3 Pupil

Outdoor Learning linked to Science and other topics such as Maths and Art.

Knowledge Matrices constructed and shared with staff.

Topic	Year	Learning Objectives	Resources	Activities	Assessment
...

Science skills are reinforced and applied in many areas of the curriculum. Pupils understand Science learning is not isolated and influences the whole world around us.



INDIAN Peacock

The peacock is famous for its brilliant, iridescent tail feathers. The peacock name in Marathi is 'Mori'.

HABITAT: The Indian peacock is a resident breeder across the Indian subcontinent and Sri Lanka. In the Indian subcontinent, it is found mostly below an elevation of 1,800 m (5,900 ft) and in forest areas at about 2,000 m (6,600 ft). It is found in dry and semi-deciduous forests, but can adapt to cultivated regions and areas of human habitation and is usually found where water.

Science in ICT



National animal Bengal: Tiger



DIET: They eat water buffalo deer gaur and wild boar and other types of meat such as takin, hog, deer, they have been known to take on other predators such as leopards, black bears, crocodiles.

Sad fact © lots of people are killing these wonderful creatures!!!

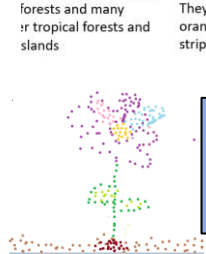
Fun fact

HABITAT: BENGAL tigers live in tropical moist evergreen forests, tropical forests and many or tropical forests and slands

BENGAL tigers are vicious and sneaky predators

They are black, orange and white striped carnivores

Most of them live solitary lives



Science vocabulary is used in other subjects.

Science is put into context for pupils and strengthens learning.

Diverse range of science books purchased to be used in science lessons and for class texts.



Links between Science and other subjects are made clear to staff and children.

SWO/B: Science is enriched by provision of a variety of opportunities that deepen and extend learning

Pre-PSQM

During PSQM

Impact

Reflection

Some Science homework activities were taking place at home. Some Science clubs were running in school pre-covid. Science Ambassadors didn't exist.

I really enjoyed Science Week and the activities!
Year 1 Pupil



I enjoyed showing the little children how to complete the experiments! I had to remember to ask them lots of scientific questions!
Year 6 Pupil



Science Week provided the children with the opportunity to see a variety of Scientific Enquiry. It also raised the profile of Science and engaged them in the subject.



Biddenham Science Competition - 2nd Place!



I learned how to work like a Scientist!
Year 4 Pupil

All children had the opportunity to work with two qualified Scientists across the week and the Science Ambassadors, **inspiring them to become scientists themselves.**

Year 5 Trip to Space Centre.



Science Week in school led by Science Ambassadors. Children had the opportunity to work with two Scientists. The Science Ambassadors also lead a Science Fair in the hall for all children to attend. There was also a whole school project focused on Observation over time where classes completed their own experiment.

One of the best things to come out of this year is the development of the role of science ambassadors. We will continue to ask Science Ambassadors to run activities during Science Week as the feedback from the children showed they loved working with other children across the school. It has been difficult to incorporate parents in science this year. This is something which I will investigate further next year, looking into ways to include Parents in Science, e.g. Science Workshops, stem careers day etc. A Science Homework will be sent home at least once a term in our Homework Logs. This will further foster links with home and school.

