



Name of school	8970 Cestria Primary School
Name of teacher	Jonathan Walker
Hub leader	Janet Barnett
Award submitted	<u>PSQM</u>
Reviewer	Eleanor Atkinson

Criteria	Indicator	Observations
SL1	There is a clear vision for the teaching and learning of science	There is a clear vision for the teaching and learning of science that has been created by both staff and pupils. This is displayed prominently around school which has had a positive impact on focussing everyone's mind on practical and engaging science. I am impressed by your evaluations and reflections on this process. You have ensured that there is action behind the intention and have created an investigation hub in response to this. When you come to review the principles, will you add parent or governors voice?
SL2	There is a shared understanding of the importance and value of science	You have worked very hard to make science more prominent around school. There have been increased displays, science related trips, staff meetings and discussions with children. The very visual Principles of science displayed in every classroom and in the science hub, serves to remind everyone how important science is and how it is valued throughout the school. The value is shown further by having a dedicated investigation hub and clear guidelines on the number of hours dedicated to the teaching of science.
SL3	There are appropriate and active goals for developing science	Your SDP has clear and active goals specific to science. The focus has been on increasing the frequency of investigative science and progression of skills which book scrutiny shows has improved. Your 1:1 visits with staff have ensured any problems could be discussed in a frank and honest way leading to a rapid implementation of a new scheme thus improving progression of skills. How will you ensure science retains its high prominence in the next academic year?

SL4	There is a commitment to the professional development of subject leadership in science	The fact that you are part of a STEM network communicates your interest in science and supports the professional development of your role as SL. You have engaged with others in this network to better understand assessment and monitoring which has had an impact on your confidence as SL The PSQM year has provided many opportunities for you to develop in your role which have benefited the other staff at Cestria. Are you aware of Reach Out CPD which is free online science CPD that you and other members of staff can access to develop further?
SL5	There are monitoring processes to inform the development of science teaching and learning	It is very clear from the evidence provided in the CPD log, the portfolio and reflections that a range of monitoring processes are informing the development of science. The quality of teaching and learning has improved as a direct result of this. I agree with your next steps to collect pupil voice just twice a year. We can't always do everything that we would like to so realistic goals are important.
T1	There is engagement with professional development to improve science teaching and learning	You have been proactive in finding out where your colleagues lacked confidence and have implemented support and a range of monitoring activities to ensure the best outcomes in a very informal way. It is not clear if you have been able to feedback the RSC session you attended yourself on Working scientifically but I can see from CPD log that you held several staff meetings this year. As already mentioned, you might like to look at ReachOut CPD from Imperial College, which is a free online resource and a quick, easy way to support staff's subject knowledge. The Ogden Trust also offers free CPD (I know there are sessions running at Durham university) and also this comes with free resources. Next steps: Consider auditing staff skills and targetting CPD to areas of weakness. STEM National learning centre often offers grants for CPD there.
T2	There is a range of effective strategies for teaching and learning science which challenge and support the learning needs of all children	The investigation hub has been one successful strategy for teaching science. What other new strategies have you introduced? What strategies are used to support the most/least able children at school? Have you considered using concept cartoons or Active assessment, Post It planners, Discovery Dog or Drama as strategies for teaching science? There is also a range of exciting online resources to increase enquiry such as Explorify and BBC terrific scientific.
T3	There is range of up-to-date, quality resources for teaching and learning science which are used regularly and safely	The portfolio clearly shows a range of up to date resources being used such as microscopes and iPads. I believe there a range of iPad apps that include light sensors, sound sensors and even pulse meters that may interest you? The resources are stored centrally in the Investigation hub and used under adult supervision. The ASE have produced a book called "Be Safe" which is relatively cheap and documents all risks for practical science lessons.
L1	There is a shared understanding of the purpose and process of science enquiry	The principles show that there is a shared understanding of the purpose and process of science enquiry and it is very clear that there is lots of hands-on investigations now taking place. It is not clear how questions are chosen to investigate? Is this child or teacher led? How do pupils plan an investigation? How to they evaluate and report on their findings? Is there evidence of children using different enquiry types such as: sorting and classifying/pattern seeking/fair testing/researching/observing over time? The book "it's not fair or is it" will support you and your staff in this area.

L2	There is a shared understanding of the purposes of science assessment and current best practice	The AFL activities are a brilliant way to show progress being made within lessons and the BEL stickers ensuring specific skills are focussed on, are moving your pupils forward. Whilst you are continuing to develop science assessment at Cestria, you may be interested in looking at TAPs project and ASE PLAN. They are excellent and free resources to support you further in this area.
L3	There is a commitment to developing all children's science capital	Through the range of visits, visitors and science activities you have developed the pupil's science capital. Energy Heroes, Northern Power Grid and Nissan are all innovative ways of achieving this. There may be parents or grandparents who work in a STEM related industry that may be willing to talk during an assembly. Why not put a "shout out" on your twitter feed?
WO1	There are appropriate links between science and other learning	The portfolio demonstrates many links to other learning. I loved the links between science and D&T with the model body making, the use of iPads as microscopes and the many links to art. It is important that as a team you take time to reflect and I am sure many other links will be possible such as PE and the circulatory system, the importance of a balanced diet and designing and cooking a healthy meal. Music links with the topic sound in science whilst electricity can be applied to make torches, burglar alarms or light houses in D&T.
WO2	There are appropriate links with families, other schools, communities and outside organisations to enrich science learning	You have increased the children's capital by inviting a range of visitors to school and focussing on science as a school for the trips this year. The links with Energy heroes and Power grid have allowed pupils to see science in a real-life context. You mention cost as an issue but there are many free outings and visitors that can be sourced. The RI will visit schools, free of charge to carry out talks and assemblies, local country parks often have rangers that will gladly show groups of children a variety of wild life and recycling centres often have free visitors centres for school groups.

Overall comment	You have worked hard to make many positive changes this year and all whilst new to the role and having paternity leave! Well done! I enjoyed reading this submission and especially about The Investigation Hub.
This submission meets the criteria for PSQM Award	Reviewer signature and date Eleanor Atkinson 16/08/18 Many congratulations on all you have achieved this year. You and your colleagues should be very proud. Great leadership. Well done!  National Director: Primary Science Quality Mark