



Lambourne Close, Bournmoor, Houghton-le-Spring, DH4 6HF 0191 3854291
e-mail: bournmoor@durhamlearning.net web: www.bournmoor.durham.sch.uk

Primary Science Quality Mark (PSQM) Newsletter – 21 September 2021

Dear Parents and Carers,

We would like to share with you some great news! We have been awarded the Primary Science Quality Mark (GILT Level) and we are so proud to receive this award which recognises the continued excellence in the teaching of Science. Mr Seaton, our Science co-ordinator, has worked very hard putting the submission together to reflect all the learning in our school.

We focus on teaching a broad and balanced curriculum that allows children to develop essential skills and knowledge. In particular, our teaching of Science is strong and forms part of our commitment to developing STEM (Science, Technology, Engineering and Maths) in our school. Receiving this award is such a positive reinforcement of all the quality learning that takes place, the support we have from parents and our governors. Also, it reflects the excellent local links we have in our area that we use as part of our learning. As you may remember, we won an electric car in a competition set by Newcastle University Propulsion Department to design a car of the future and answer the question 'What will travel look like in 2050?' They liked our ideas so much they awarded us this prestigious prize. Not only do our older pupils get the chance to build it each year as part of their STEM work, they also get to race it.

The Primary Science Quality Mark is led by the University of Hertfordshire, School of Education in collaboration with the Primary Science Teaching Trust who say: 'The Primary School Quality Mark programme ensures effective leadership of science, enables schools to work together to share good practice and is supported by professional development led by local experts. Schools that achieve PSQM demonstrate commitment and expertise in science leadership, teaching and learning.' We couldn't agree more as it has allowed us to really innovate and develop our teaching in this key area of the curriculum.

Here are some of the comments we received in the feedback from our PSQM portfolio submission from PSQM GILT Reviewer Joanne Moor:

'The importance of science to the school comes across very clearly in the portfolio and on the Twitter account. Science continued to be planned for throughout the two lockdowns and science monitoring also continued, which demonstrates the priority the subject has within the school. It is also good to see that governors take a keen interest in science.'

'The Subject Lead has a commitment to professional development.'

'The robotics project is exciting, and it is good to see Bournmoor sharing its experiences with other schools.'

'A key principle of the school is child led investigations.'

'It is good to see that there is a range of initiatives to develop children's Science Capital, including regular discussions about science in the news.'

'There is lots of evidence of cross-curricular links with Literacy in your calendar of events, as well as some linked to maths. The emphasis on robotics also links to Computing.'

'This year has been a challenging year for maintaining and building links outside the school, so it is good to see link ups with organisation like London Zoo via zoom as well as some trips and visitors into school. Well done for making good use of the local environment. The plans you have for the future with Nissan and other engineering companies sound exciting.'

'It has been a very tough year and hats off to all of you for getting through it and maintaining the profile of science during two lockdowns. Well done for getting through it and keeping focused on science during such a tough time. It is lovely to see all that you have achieved and your plans for next year. Congratulations to everyone at Bournmoor Primary who have worked so hard over the last two years to achieve this award.'

Mr Seaton put together a large portfolio on behalf of our school and below are 3 of the *many* slides that were submitted. They allow you to see the depth of information needed and the team work to achieve this award.

SCIENCE IN EYFS

"Science links to almost every aspect of the EYFS curriculum. We discuss it in everyday conversations and it links to stories, creative activities and exploration in Maths"
EY Lead

W01 / L2

A focus on the recording of Science throughout PSQM has ensured that timely observations are made and parents/carers are up to date with their child's progress – resulting in increased opportunities to enhance Science Capital outside school.

EYFS framework link: Understanding the World
 Explore the natural world around them, making observations and drawing pictures of animals and plants.

W01

During child-initiated learning, it was observed that the Reception child noticed the duck was not able to move down the slide quickly enough "I need to get more water to make it slide, then it will move quicker" – an example of how resources in our EYFS are open to interpretation and children often direct their own learning based on their own understanding and interests.

W01

Adult directed task that demonstrates the child's awareness and understanding of the world around them, in line with the EYFS statutory framework. Teachers plan directed tasks that take advantage of our extensive grounds and outdoor areas. This example demonstrates strong cross-curricular links with the expectation of key vocabulary, utilising specific physics skills delivered in EYFS.

T2 / T3

EYFS framework link: 1 and 4 year olds Understanding the World
 Explore the natural world around them, making observations and drawing pictures of animals and plants.

T3

Tapestry is an established form of recording observations in EYFS. The voice of the child is captured and staff are trained to develop the child's understanding by guiding learning and encouraging them to look for patterns/observe changes/identify common themes.

SL5

Resources in EYFS Science station
 Children can freely access resources to support their exploration, such as magnets, magnifying glasses and tweezers. We also set up specific activities in the provision"
EYFS Lead
 L1 / L3

3

SCIENCE IN YEAR 2

The Science learning journals are a familiar process for the pupils and allow them to self-assess their understanding of the topic"
Y2 Class Teacher

L2

"I love science, it is my favourite thing in the classroom, I love getting to go outside!"

Year 2 make exceptional use of outdoor areas, library and woodland elements of the school grounds. The Year 2 Class Teacher (English lead) utilises these to engage children in writing activities and encourages reluctant writers to use creativity and scientific links such as habitats.

L3

Science recording shows a clear link to classroom displays and the use of vocab walls independently by the children in Year 2.

One of my seeds will have water but no sunlight.
 One of my seeds will have water but no sunlight.

Year 2 designed leaflets to explain to their mums how to grow a beanstalk.

Enquiry types are wide and varied, for example, teachers plan investigations to take advantage of half term breaks so children can observe significant changes over time. The voice of the child is captured and pictures are purposeful and child specific.

L1 / T2

Cross-curricular links are encouraged throughout and Y2 Maths objectives fit perfectly when collecting and collating data. Pictures with the 'voice of the child' are used as a key tool to record the practical element.

W01

Opportunities for creative recording and lesson delivery are planned by teachers. Children are not restricted by written English skills and are encouraged to record/present their findings in a range of suitable formats.

T2

5

EXTERNAL LINKS

Long established robotics links with CAD/CODE (formerly of Park View DT department) are a staple of STEM delivery in KS2. This is high profile across school, display and robotics areas demonstrate to children in Year 1-4 what they should expect. Children have the opportunity to experience secondary level delivery and as a result, are more prepared for the expectations of Secondary Science, developing problem solving and enquiry skills throughout the sessions.

T1 / T2 / W01

W02

Developing long-established links with Nissan Sunderland has continued to improve the level of Science Capital among children and the level to which this is discussed outside school. Nissan Sunderland is located 10 miles from Burnmoor Primary School meaning many children have a direct family link to the factory.

W01 / W02

Working to develop our external links with the local community, children visited Beamsish Museum to take part in a Science focussed STEM day, developing understanding of Chemistry in a real life context, including strong cross-curricular links with English and History.

W01 / L1

Elba Park links have consistently provided children from all year groups a chance to engage with Science in the real world and also within their local community. Bull planting, Cuckoo Chasing and Mrs-Bawal Safari are included in the experiences.

T2 / W02

Year 2 made great use of their new screen to take part in a virtual trip to London Zoo during lockdown. They prepared questions for the staff as part of their English lessons and noted the responses.

T3

16