



Happy, Healthy and Fulfilled



Easington C of E Primary School

Science Rationale 2020-2021

INTENT

At Easington C of E Primary, it is our vision to instil a lifelong love of science within our pupils. We also aim for our children to appreciate and understand that science has changed our lives and is vital to our world's future prosperity. Furthermore, we aim to inspire in pupil's a curiosity and wonder about the natural and man-made world and a respect for the environment that will remain with them for the rest of their lives.

Our aims are to fulfil the requirements of the Nation Curriculum for science; providing a broad, balanced and differentiated curriculum; ensuring the progressive development of knowledge, skills and vocabulary. We will provide a bespoke, rich and varied science curriculum to challenge and meet the needs of our children. From EYFS up to KS2 our children will build up a body of key foundational knowledge and concepts. We will encourage our children to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. We will enrich children's experiences by providing opportunities for educational visits and inviting visitors into school.

IMPLEMENTATION

The science subject leader is responsible for the curriculum design, delivery and impact of this subject. To ensure high standards of teaching and learning a progressive curriculum is implemented throughout the whole school. Due to the class structure in school the science curriculum is based on a two-year cycle. Our progression of knowledge and skills documents which incorporate Working Scientifically are used to plan each science unit. Using these documents ensures that curriculum overage is accurate and children have opportunities to build upon prior knowledge. When teaching science, children's interests are always considered to ensure their learning is engaging, real and relevant. Teaching key scientific vocabulary is also a key part of our science curriculum. This vocabulary is identified for every science unit in a progression document and it highlights how vocabulary previously taught is built upon in each unit.

During each science unit children's learning will be assessed for all key objectives.

Documents will be completed to show whether children are working at the expected standard. These documents are a record of each child's progress every year. During staff meetings science work is internally moderated. The science subject lead takes part in termly external moderation meetings with colleagues at Durham University. The science lead also takes part in termly CPD sessions provided by Durham University.

Science in our school provides excellent opportunities to enhance the learning of all pupils including our more able pupils. Our more able pupils benefit from planning lines of enquiry, asking questions, problem solving, analysing results and drawing conclusions based on scientific findings. Each class is provided with many opportunities to Work Scientifically throughout each year. Our curriculum is flexible in order to accommodate this and during the year there is room for science units to be lengthened or shortened. We also take a flexible approach with our science curriculum in order to provide rich and varied science activities involving science focused visits and visitors.

SEND/Pupil Premium/Higher Attainers

All children will have Quality First Teaching. Any children with identified SEND or in receipt of pupil premium funding may have work additional to and different from their peers in order to access the curriculum dependent on their needs. As well as this, our school offers a demanding and varied science curriculum, providing children with arrange of opportunities in order for them to reach their full potential and consistently achieve highly from their starting points.

IMPACT (Some ideas I had – will need to implement and introduce some!)(Not sure that I am on the right track!)

How the impact of the science curriculum in our school is measured:

- Children enjoy and are enthusiastic about science in our school.
- Assessing children's understanding of scientific vocabulary before and after each science unit is taught.
- Lesson monitoring by SLT.
- Marking of science work in books.
- Using dialogic learning tasks to assess children's learning.
- Summative assessment of pupil discussions about their learning.
- Interviewing the pupils about their learning.
- Moderation staff meetings where science books are scrutinised and there is an opportunity for a dialogue between teachers about children's work.
- External moderation of children's work.
- Formal reporting of standards at the end of each key stage.
- Annual reporting of progress in science to parents.
- Our SLT and governors are kept up to date in the way science is run in our school with subject reports, action plans and review meetings.