



'BE THE BEST YOU CAN BE!'

SCIENCE Policy

Lead person responsible:

Mr P Norris

Date: March 2021

Review Date: March 2024

Philosophy

The teaching of science aims to promote knowledge, understanding, curiosity and develop a questioning and inquiring attitude towards ourselves and the world about us. We aim to achieve this through scientific investigations and processes.

Purposes

- To follow an amended version of the QCA programmes of study for KS2 covering the new additional topics introduced in September 2014.
- To use a systematic scientific approach to understand the world around us, using investigations and observations.
- To develop a progressive and continuous work programme throughout the school.
- To promote the development of positive attitudes towards scientific methods and progress.
- To develop the necessary skills to achieve the required knowledge and gain experiences in hands on scientific activities.
- To recognise and plan for different ability groups where possible.
- To foster respect for the environment, each other and all living things around us and our interdependence on each other.
- To achieve and promote sustainability across the school and the wider school community; pupils and teachers are encouraged to consider their impact on the environment and where possible to reuse reduce and recycle.

Outcomes

- Science is divided into topics for each year group.
- Each year group plans their programme of work collaboratively using the RGJS scheme of work.
- All children will take part in investigations. Where necessary work will be planned to meet the children's ability and linguistic needs.
- Cross-curricular links will be made where appropriate.
- Year groups are to visit or receive visits from outside agencies such as the Royal Institute, The Wellcome Trust, Traid and the Science Museum.
- All health and safety procedures will be adhered to. See ASE site for details.

Presentation

- Only pencils must be used for all written work.
- All diagrams, charts and graphs must be completed in pencil.
- Graph paper when used must be neatly folded and securely placed into the Science book.
- Close attention should be made to predictions, method and conclusions ensuring constructive comments have been made.

Monitoring and Assessment

- The Science Leader will periodically review each year group's planning, ensuring that opportunities for SC1 have taken place.
- At the end of each topic, children will take a test covering the term's topics to be included in the Tracking and Assessment File. This data will be recorded in the Rising Stars on-line assessment spreadsheet.
- All Science books will be monitored once during the academic year. A sample of children will be interviewed and the findings will be presented to the S.L.T. with a view to tailor future INSETs to address any concerns.
- The Science Leader will observe the teaching of science across the school and will be required where possible to demonstrate best practice and deliver INSET.

Environmental Science

Roe Green is committed to achieving a policy of promoting sustainability across the school and the wider school community. Pupils and teachers are encouraged to consider their impact on the environment and where possible to reuse reduce and recycle.

Curriculum

Lessons highlighting the causes and consequences of climate change have been included across a variety of subject areas. Their aim is to increase awareness of the impact of global warming and to offer alternative views and solutions to the climate crises.

Recycling

Children will recycle paper from each classroom once a week, the green box marked with the classrooms number is to be used only for this purpose. Children will empty the contents in the large recycle bins located at the school entrance.

Kitchen waste/organic material and cardboard are recycled. The bins for this purpose are located by the Site Manager's office.

Please remind the children to switch off lights and close doors after leaving the classroom.

Outdoor Spaces

Roe Green has a number of outdoor spaces both in the front and back playgrounds. Normal health and safety rules should be followed (see playground rules).

The back playground has one raised borders for growing, please feel free to use them with your class. All the necessary gardening tools, gloves, seeds etcetera are available in the shed at the back of the Year 6 playground.

In addition a covered and fenced off area adjacent to the raised borders is available for outdoor lessons. A small mobile whiteboard is kept in the shed by the covered area.

PLEASE NOTE THESE ARE RESOURCES FOR THE WHOLE SCHOOL

RESPECT THEM AND LEAVE THEM AS YOU FIND THEM.

Appendix – 2019/2020 CURRICULUM FOCUS

Whole school focus is to develop an understanding of the climate emergency and the need for change.

Through our Science and Humanities curriculum in particular, each year group will plan and complete lessons making cross-curricular links across a number of subject areas that will deal with aspects of the climate emergency. These lessons will cover some of the issues around global warming and its consequences to our planet and the species that live on it.

Whole school curriculum fortnight will showcase work from our climate emergency focus.

Year 3: In science, Year 3 are studying the causes of rising ocean levels and the effects of climate change on animal food chains. In Geography pupils will study climate and climate zones and how climate change is affecting our world. Within literacy units, pupils will be introduced to the book 'One Plastic Bag' looking at recycling and waste.

Year 4: In science, Year 4 are studying ocean pollution, how climate changes and our over use of single-use plastic is affecting habitats of animals. In addition, pupils will be looking into renewable energy sources. In Geography, pupils will study the effect of deforestation on the Amazonian rainforests. As part of PHSCE, Year 4 have focused on climate change during healthy living week; this is further embedded by listening to daily news at registration time which places a high agenda on the climate emergency.

Year 5: In science, Year 5 will explore why numbers of puffins are dropping due to climate change. In Literacy, pupils will write persuasive letter about plastic/pollution. They will also design a leaflet for their own eco-lodge using persuasive features of advertising incorporating solar/wind energy features. Whilst in Geography, pupils will be considering the question "Are we damaging our world?" DT lessons will focus on the negative impacts of consumerism and fast fashion, and where our food comes from to explore the impact these have on the environment. In PSHCE, pupils will consider inspirational people including Greta Thunberg.

Year 6: In science the differences in climate and temperature will be investigated, an experiment to demonstrate the effects of carbon dioxide on climate change will be created. In Geography palm oil will be explored, including an exploration into which products contain palm oil, investigating products in our own homes. Pupils will also explore the affect farming palm oil has on the rain forest environment; the Iceland Ran-Tan advert will be used as a stimulus. Work from this exploration will lead in to persuasive writing in Literacy. In the summer term our focus will turn to plastics where we will use the BBC's 'War on Plastic' documentary as a starting point for letter writing and recycled art.