

**Goostrey Community Primary School**

**Science**

1 Rationale

Science stimulates and excites pupils' curiosity about phenomena and events in the world around them. It also satisfies this curiosity with knowledge. Because science links direct practical experience with ideas, it can engage learners at many levels. Scientific method is about developing and evaluating explanations through experimental evidence and modelling. This is a spur to critical and creative thought. Through science, pupils understand how major scientific ideas contribute to technological change - impacting on and improving quality of life. Pupils recognise the cultural significance of science and trace its world-wide development. They learn to question and discuss science-based issues that may affect their own lives, the direction of society and the future of the world.

2 Aims

Foundation Stage and Key Stage 1:

During Key Stage 1 pupils observe, explore and ask questions about living things, materials and phenomena. They begin to work together to collect evidence to help them answer questions and to link this to simple scientific ideas. They evaluate evidence and consider whether tests or comparisons are fair. They use reference materials to find out more about scientific ideas. They share their ideas and communicate them using scientific language, drawings, charts and tables.

Key Stage 2

During key stage 2 pupils learn about a wider range of living things, materials and phenomena. They begin to make links between ideas and to explain things using simple models and theories. They apply their knowledge and understanding of scientific ideas to familiar phenomena, everyday things and their personal health. They begin to think about the positive and negative effects of scientific and technological developments on the environment and in other contexts. They carry out more systematic investigations, working on their own and with others. They use a range of reference sources in their work. They talk about their work and its significance, and communicate ideas using a wide range of scientific language, conventional diagrams, charts and graphs.

3 Guidelines for teaching

The school’s SoW is used as the basis for work in Science. It shows how the subject will be taught to children attaining at levels broadly appropriate for their age.

Science will contribute to learning across the curriculum and is used in cross curricular topic based teaching. The class teacher at the end of each term will record units covered and the coordinator will collect evidence of this through teacher evaluations and book scrutiny.

Assessment and planning will follow the school’s assessment and planning policies. Teachers will provide the coordinator with a teacher assessed level for each child at the end of the school year. This allows for the tracking of children’s progress in science from year to year.

Health & Safety in science

When working with tools, equipment and materials, in practical activities and/or in different environments, including those that are unfamiliar, pupils will be taught:

1. About hazards, risks and risk control.
2. To recognise hazards, assess consequent risks and take steps to control the risks to themselves and others.
3. To use information to assess the immediate and cumulative risks.
4. To manage their environment to ensure the health and safety of themselves and others.
5. To explain the steps they take to control risks.

**When monitoring my subject in school I expect to see:**

In planning- all topics are covered across the school (overviews). Science is being taught for the statutory 2 hours per week in KS2. These plans are on staff share and the website so make sure that the coverage matches to the correct time of year.

In books (work and marking) - evidence of topics, evidence of scientific thinking skills, lesson objectives, children’s work, with labelled diagrams/ pictures, photographs/drawings of experiments. All pieces of work to be acknowledged by the teacher, and some lesson objectives to be referred to. Investigations are to be written up following the whole school vocabulary.

At different points throughout the year, but not all year:-

On the walls in classrooms- displays incorporating Science topics, using appropriate scientific language. Prominent scientists (linked to a science topic) should be displayed on the walls during the year. This should include a diverse range of scientists.

Information texts accessible to children covering topic being taught within Science.