St Wilfrid's C.E. Primary School
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Rationale

The study of science is an essential part of the school curriculum & through studying science the children will develop skills to explore and understand the world in which they live.

- Children should be involved in both practical & written work.

- all the children have the potential to progress scientifically. We know that they arrive with different levels of language and experience & aim to provide appropriate experiences and support to enable them to develop scientifically.

- Good science in the Primary school should be firmly based on children's first hand experiences and the sorting and classifying of these experiences in a responsive and logical way.

- Science in the classroom should start from the children's understanding & give them the opportunities to develop & change this understanding.

Purpose and Aims

The aim of this policy is to clarify how Science is taught at this school.

Our aims in teaching Science are to :-

- deliver the National Curriculum Science orders in ways that are imaginative, purposeful, controlled and disciplined but also enjoyable.

- help in developing and extending the children's scientific concept of their world.

- encourage the development of investigation, exploration, collaboration, observation & evaluation.

- carry out planned, safe, practical activities.

- develop the use of scientific language, recording and techniques.

- enable children to become effective communicators of scientific ideas, facts and data.

- to build upon children's scientific skills, knowledge and experiences so

that their knowledge and understanding is deepened and enriched as they progress through the school.

- encourage the development of positive attitudes to science.

Definition of Science and Content of the Curriculum

Science is a body of knowledge, which is built up through experimental testing of ideas. Science is also a methodology, a practical way of finding reliable answers to questions we may ask about the world around us.

The Science Curriculum (1995) has three Attainment Targets:

i) Experimental and Investigative Science: This is all about pupils developing the intellectual and practical skills necessary to explore the world of science and the procedure of scientific exploration and investigation. The other Attainment Targets provide the context through which these skills and procedures may be taught.

They are:

ii) Life and Living Things

iii) Materials and their properties

iv) Physical Processes

Co-ordination & the Role of the Science Co-ordinator

Science education throughout the school is co-ordinated by a member of staff who is supported by another member of staff.
The role of the co-ordinator is :-

To support colleagues in planning, assessing & moderating Science as well as offering guidance on record keeping if required.

To monitor progression in Science.

To take the lead in policy development & implementation of the QCA schemes of work, thus ensuring progression & continuity.

To be responsible for Science resources & the resource area.

To keep up to date with developments in Science education & resources, informing colleagues as appropriate.

To maintain & further develop the Science Week in school.

To administer the Science budget.

Delivery

The Science curriculum is delivered through topics as set out in the QCA documents. The class teachers teach Science.

Teaching Methods

Science is taught to whole classes in mixed ability groups. The classroom teacher caters for pupils with specific learning difficulties. The children are encouraged to recognise their existing knowledge of particular topics & to discuss this knowledge with each other & the teacher. Practical work is vitally important & the skills of observing & recording are developed from this.

Resources

Each year group has sets of teacher's notes & pupil's books for the Science topics specified in the QCA documents.
There is a Science Resource area for centralised access to & storage of Science equipment & supporting texts.
Children work in A4 sized exercise books.

Assessment & moderation.

Assessment is both formal & informal. It should as far as possible be positive as well as critically informative for the children. Most day-to-day assessment is informal & formative, both during & after a Science lesson, & it is used to make decisions to support further learning for the children. Formative assessment uses a variety of techniques, (see Appendix 2).
Assessment can also involve pupils reflecting on & assessing their own work during group & class discussions.
At the end of each Science unit of work, teachers will formally assess the knowledge & skills of the pupils, using differentiated Assessment Task sheets.

Evidence provided through assessment will be used by teachers for the moderation of work & levels. A portfolio of moderated science work will be developed to illustrate standards that have been agreed.

National Curriculum Levels

Reception	Working towards Level 1
Year 1	Level 1
Year 2	Level 2
Year 3	Level 2 - 3
Year 4	Level 3

Year 5 Level 3 – 4
Year 6 Level 4- 5

Planning

Class teachers plan their Science Curriculum using the QCA documents. Copies of the unit & individual lesson notes are kept in the Science folders, together with copies of any other resources used.
In Key Stages 1 & 2, Science is taught for a minimum of 1 hour each week.
In Key Stage 2, increasing emphasis is placed on Sc1, (investigative work).
In Key Stage 1, at least 1 lesson each half term should be related to Sc1.
In the Foundation Years, all the lessons should be related to children's skills development.

Equal Opportunities.

Strategies are adopted to ensure that all children have the opportunity to become scientific regardless of gender, race, class, physical or intellectual ability. We try to ensure that expectations do not limit pupils' achievements and the assessments do not involve any cultural, social, and linguistic or gender bias.