Science Procedure

Purpose

This procedure reflects the values and philosophy of the school in relation to Science .

Rationale

Science is a subject within the National Curriculum. In this school the work is set within the context of "learning from doing"
Ewanrigg School aims through Science:

- Delivering all the requirements of the National Curriculum in relation to science and covering major scientific concepts.

- Ensuring pupils have sufficient scientific knowledge to understand both the uses and implications of science, today and in the future. This will also give students an appreciation of the changing nature of scientific knowledge

- The development of pupils' ability to pose questions, investigate these using correct techniques, accurately record their findings using appropriate scientific language and analyse their results

- Making pupils aware of and alert to links between science and other school subjects, as well as their lives more generally

- Help pupils recognise the cultural significance of science and trace its development.

Teaching and Learning style

- All lessons have clear learning objectives which are shared and reviewed with the pupils effectively.
- A variety of strategies, including questioning, discussion, concept mapping and marking, are used to assess progress. The information is used to identify what is taught next.
- Activities inspire the pupils to experiment and investigate the world around them and to help them raise their own questions such as "Why...?", "How...?" and "What happens if...?"
- Activities develop the skills of enquiry, observation, locating sources of information, selecting appropriate equipment and using it safely, measuring and checking results, making comparisons and communicating results and findings.
- Lessons make effective links with other curriculum areas and subjects, especially English, Mathematics and ICT.
- Activities are challenging, motivating and extend pupils' learning.

- Pupils have frequent opportunities to develop their skills in, and take responsibility for, planning investigative work, selecting relevant resources, making decisions about sources of information, carrying out activities safely and deciding on the best form of communicating their findings.

Differentiation and additional educational needs

Making pupils aware of and alert to links between science and other school subjects, as well as their lives more generally
Where pupils display a high level of academic aptitude, there will be a concerted effort to ensure that they are challenged by the material and activities covered.

Long Term Plans

A two year cycle is planned in line with the New National Curriculum.
From the long-term plan the medium term plan can be completed.

Medium Term Plans

Upper and Lower school teams will complete medium term plans. Medium term plans are usually completed for a 6 – 8 week period these will be slightly more in depth than the long term plan and provide an over view of what will be taught in each lesson. The medium term plan will be used to develop a daily lesson plan.

Assessment

During each lesson the teacher will monitor progress and adapt the teaching according. . Teachers' assessment takes place at the end of each unit of work, noting any attainment and progress which is significantly lower or higher than expected. Teachers analyse pupils' progress in the units of work they have completed at the end of each school year to complete the annual report to parents. This report takes the form of a summary of the teachers' observations and continued assessment of the pupils at work thus giving parents a view of what their children know, understand and can do.

The Learning Environment

Activities will focus on developing pupils' ability to enquire, observe, locate sources of information, plan investigations and work scientifically. Classrooms will have displays of current science in hand and should display prominently the relevant scientific vocabulary being introduced in current units of work.. The profile of science should reflect its place as a core subject and will make links to other school subjects and the natural world generally. Resources for the unit of work being covered should be appropriately accessible.

Health and safety

Teachers will carefully plan lessons to ensure any experiments comply with all school Health and Safety procedures. Any 'new' experiments which a teacher has not used in class before should be trialled prior to being performed with pupils in class time. At the beginning of any experiments, the teacher should outline the purpose of the experiment to the class and all hazards and safety precautions must be thoroughly outlined.