

## **ROSEACRE PRIMARY ACADEMY**



### **Ethos Statement**

This policy reflects our academy's ethos, which recognises, celebrates and welcomes diversity. We believe that each and every one of us brings something valuable to our community. We aim to develop children's personal qualities and achievements and are committed to giving all of our children every opportunity to achieve the highest standards.

This policy helps to ensure that this happens for all children in our academy, regardless of age, disability, religion, gender, sexual orientation, ethnicity, attainment or background.

### **Aims/Objectives**

To promote the children's natural curiosity about the world around them. They will be encouraged to ask questions, explore their ideas and make discoveries for themselves. Children will be provided with a stimulating environment where practical activities are meaningful and challenging. We endeavour to provide a broad and balanced science curriculum which is well suited to the children's abilities and aptitudes. The curriculum will draw from the children's interests and build upon their experiences.

### **Time Allocation**

Key stage 1 - 1 hour 30 minutes per week

Key stage 2 - 2 hours per week

### **Curriculum Content**

We follow the New National Curriculum for science and the expectation for these topics are in the 'Assessing without Levels' documents for each class. This also details the coverage for each year group.

### **Key Skills**

Teachers should provide opportunities for practising, developing and refining a range of key skills. These key skills promoted in science are:

- Communication- Speaking effectively for different audiences, listen, understand and respond appropriately to the ideas of others and participate in group discussions.
- Application of number- Processing data, solve increasingly complex problems and explain the reasoning used.

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- Information Technology- Using ICT sources and tools to research, analyse, interpret, evaluate and present information.
- Working with others- Contribution to small group work or whole class, ability to work as a team and the development of the social skills of co-operation and mutual understanding.
- Improving own learning performance- Understanding purpose for learning, reflect on the processes of learning, assess progress, identify problems and plan ways to improve learning.
- Problem solving- Identifying the problem, planning ways to solve a problem, monitoring progress and reviewing solutions to a problem.

Thinking skills- By using thinking skills pupils can focus on 'knowing how' as well as 'knowing what'- learning how to learn. The following thinking skills complement the key skills and are embedded in the science curriculum. They allow pupils:

- Information processing skills- Locating, collecting, sorting, classifying, sequencing, comparing, contrasting and analysing information.
- Reasoning skills- Give reasons for opinions, draw inferences, make deductions, use precise language to explain thinking and make judgements and decisions informed by reasons or evidence.
- Enquiry skills- Asking relevant questions, pose and define problems, plan what to do and how to research, predict outcomes, anticipate consequences, test conclusions and improve ideas.
- Creative thinking skills- Generating and extending ideas, suggesting hypotheses, applying imagination, looking for alternative innovative outcomes.
- Evaluation skills- Judging the value of what they have read, developing criteria for judging the value of their own and others work and ideas, confidence in their judgements. The development of such a wide variety of skills, provides opportunities to nurture individual's talents and provide skills for adult life.

#### Assessment, recording and reporting

Children's science work is assessed using formative assessment strategies, observing and discussing scientific concepts with them during lessons using assessment opportunities highlighted on the medium term planning.

Teachers make an assessment of the children's work in science at the end of Key Stage 1 and Key Stage 2.

Children's annual school report indicates the progress that children have made each year both in terms of **knowledge and practical application**.

The science subject leader keeps samples of the children's work in a portfolio and uses these to demonstrate what the expected level of achievement is in science for each age group in school. This is now either developing, expected or exceeding in science.

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Monitoring and Evaluation

It is the responsibility of the science subject leaders to monitor standards of the children's work and the quality of teaching in science. The science subject leader is also responsible for supporting colleagues in the teaching of science, for being informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school.

Resources

Due to the recent changes in the curriculum we have not invested in any new schemes of work. The library contains a good supply of science topic books. We have a range of computer software available to support children's scientific research. Each Year Team has designated web links to interactive science sites that support learning in many topic areas. Our subscription to ASE [www.ase.org.uk/](http://www.ase.org.uk/) is current.

This policy will be kept electronically on the 'Shared Drive'. A paper master copy will be held by the Headteacher. Parents will be informed of the policy on occasional newsletters and on the school web site.

This policy will be reviewed in the spring term 2018.

Signed: *Paula Storton* Science Subject Leader

Date adopted: 18.05.2015