## **Escrick Church of England Science Policy**

At Escrick Primary School we believe that our curriculum should be broad, balanced, creative and relevant and should meet the needs of all our learners whatever their ability. We will strive to develop in pupils, curiosity, enjoyment, skills, and a growing understanding of science knowledge, through an approach in which pupilsraise questions and investigate the world in which they live.

We deliver The National Curriculum 2014 for Science and aim to ensure that all pupils:

- develop an understanding of the nature, processes, and methods of Science through different lines of scientific enquiries and a wide variety of teaching andlearning styles;
- are able to answer scientific questions about the world around them and understand the **uses and implications** of Science in the world today.

Through our Science teaching we promote:

- a positive attitude towards Science
- development of scientific knowledge and investigational skills;
- an ability to reason, predict, think logically and critically and to work systematically and accurately;
- an ability to communicate scientifically by using scientific vocabulary;
- the initiative to work both independently and in co-operation with others;
- the ability to use and apply science across the curriculum and in real life.

#### Planning and implementation

The subject leader periodically reviews the long-term plans to ensure that children have complete coverage of the National Curriculum. Through planned progression built into the scheme of work, we offer the children an increasing challenge as they move up the school. Teachers are aware of learning that has gone before which may need consolidating and building upon, and how learning will continue to build in the future.

Long term planning is based on the National Curriculum 2014 for Science.

Medium term planning will take place every half term – teachers refer to Focus education planning alongside key concept sheets, learning ladders and other North Yorkshire resources to support the planning process.

Differentiation of activities will be made in the weekly/ daily planning as appropriate to the pupils being taught based upon assessment of their prior knowledge, understanding and skills.

Short term planning should indicate, on a day to day basis, what the whole class, groups of children or individuals will do and provide an opportunity to make notes of successes and needs. Teachers will need to think about their short-term plans on a lesson by lesson basis.

All year groups should carry out practical investigations and pupil led enquiries each term at an age appropriate level. Teachers should plan to cover all of the five lines of scientific enquiry



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across a school year. Our school use pupil created mascots to promote the types of enquiry.

These types of scientific enquiry are:

Observing over time – Dingo the Detective
Pattern seeking – Sarah Sequence
Identifying, classifying, and grouping – Cyber Sorter
Comparative and fair testing – Reggie the Referee
Research using secondary sources – Professor
Bookworm

Cross-curricular opportunities should be explored at the medium- and short-term planning stages. Links may be made, in particular, with maths, computing, reading and/ or extended writing as well as topics. The use of **Focus Science** enables the teaching of Science through Literacy and vice versa.

Teachers are mindful of health and safety when facilitating investigational tasks whilst allowing children to take planned risks as part of their learning.

Equal opportunities in science will be given to all pupils.

Outside agencies will be invited into school throughout the school year to promote enjoyment of science.

Displays of science work should promote the importance of science in school, pose questions, inform on a topic area and celebrate children's achievements and knowledge. Where possible, interactive displays will be planned for so pupils can explore.

Science can also provide opportunities for spiritual, moral, social and cultural development in various aspects of the curriculum.

EYFS - We relate the scientific aspects of the children's work to the objectives set out in the Early Learning Goals (ELGs) which underpin the curriculum planning for children aged three to five. Science makes a significant contribution to the development of each child's knowledge and understanding of their local environment and variation in the natural world, plants, animals and materials.

#### **Assessment and reporting**

Assessment for learning is continuous throughout the planning, teaching and learning cycle, however Science must also be assessed formally.

Science is assessed using assessment sheets from Focus Education. Science attainment will be tracked termly by teachers on these sheets and reported yearly to the Head Teacher in summer term.

Progress will be reported to parents informally at parent meetings and formally in end of year reports. Teachers should update parents termly about which science units are being covered via termly letters and/or class pages on our website. Marking of science work will follow guidelines outlined in our Marking and Feedback Policy.

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### The role of the Science Subject Leader is to:

- provide leadership and direction for the subject
- monitor planning and progression in the subject
- play a key role in supporting, and providing resources for, teachers in the subject
- evaluate effectiveness of teaching and learning, the subject curriculum and progress towards pupils meeting year group standards through regular monitoring
- understand how the subject contributes to the SDP

The science subject leader will carry out book scrutinies and learning walks termly, monitor assessments termly and deliver staff meetings as appropriate.

The science subject leader will ensure this policy is kept up to date.

Mr. J Broxup

November 2021

Review date: Autumn 2022