



# Rossmore School

## Rossmore School's Science policy

### Intent

At Rossmore School, we encourage children to 'Take Pride and Aim High', as well as creating an environment that shows children how to be ready for life beyond the classroom. This is something that we strive to achieve in all subjects and is an ethos that drives our intent in the teaching and learning of science. This is reflected in our 'Core Principles of Science Teaching' – a child friendly document that children and teachers are familiar with that shows how Science Teaching and Learning at Rossmore School reflects the school values. It also allows children to take ownership of their learning and develop their skills and understanding in a way that is relevant to life outside the classroom.

Our core principles document is a guide to how the National Curriculum objectives can be delivered in a way that puts the child and their learning experience at the centre of the teaching and learning approach. It was developed by the staff and by listening to what the children and parents' ideas of useful and engaging Science looks like in a school.

Our aim is to have a school in which the needs of the learners are placed front and centre and that our principles statement is a shared vision that is carried through the children's Scientific learning journey. Children and adults will be motivated and engaged in science and can understand the relevance of their learning. At Rossmore School, Science is fun and learning is investigative and exploratory with children developing their scientific understanding through practical 'hands-on' activities.

### Implementation

Our planning is loosely based on the Kent Scheme of work, a scheme that promotes exploration and provides opportunities for each class to broaden their learning experiences in different ways. These ideas are adapted to align with our core principles and to ensure that the content is accessible to each child regardless of their learning needs. Additionally, each topic works towards a clear 'end point' in the form of a starting question or statement. Each lesson will be one of a series of constituent parts that work towards this end point. The result is a clear sequence of lessons for each topic that are reviewed and enhanced each year based on new experiences, new resources, current events and reflections on the effectiveness of the lesson the previous year. The 'end point' helps us to assess the children's progress against their starting question or statement.

In order to facilitate high quality teaching, it is also vital that we have the facilities and resources required to enable children to have immersive and relevant learning experiences. Regular audits of resources are taken and staff habitually check what they need half a term before teaching a topic to make sure that anything that needs replacing/replenishing has been brought to the subject leader's attention. The plans are regularly adapted to make sure that they stay relevant and that new resources that can enhance the children's learning experiences are being utilised. The process of allowing children to take ownership of their learning and encouraging them to take risks,

hypothesise and create investigations will naturally increase their enthusiasm for the subject. We amplify this by ensuring that the children's immediate environment is one that promotes Science, exploration and questioning. Classrooms, corridors and outside areas celebrate and facilitate enquiry-based learning and challenge children to find ways to understand the world around them. Teachers enrich the curriculum by using school trips, visitors, themed weeks and current events to add depth, relevance and interest to the children's learning.

### **Impact**

The result of the above measures will give us a clear way of measuring the success of learning across the Science curriculum in a way that allows children to celebrate their successes as well as knowing what they need to do to progress. If we correctly implement the strategies and aims set out in our action plan, the children should be able to know that they **are** scientists and be able to articulate why. They should respond positively and fluently when asked about the relevance of Science outside of the classroom and they should be able to talk about how they can use their enquiry based skills to solve problems.

The Rossmore Science Principles Statement should be reflected in all of the work that the children have done, as it is the key driving attitude behind our teaching and learning. Books should show a variety of approaches to problems with clear reasoning behind their ideas. The lessons should be structured, progressive and relevant with the learning enhanced by well thought out, quality resources. Equally, the school environment should show that Science is something to be celebrated and engaged with – even when they are not in a science lesson.

Staff will feel supported and confident in how to deliver an effective progression of science lessons and will have all of the equipment and resources that they need prior to delivering it. Each year group will have a regularly updated bank of bespoke lesson plans adapted from the Kent Scheme of work which build on the skills, knowledge and understanding that the children have developed over the previous years. Regular staff subject knowledge and pedagogy audits will show an improvement in confidence and will inform ongoing CPD and as a result, teachers will enjoy teaching Science and will share their enthusiasm with the pupils.

This increase in confidence and enthusiasm for science teaching and learning will result in increased attainment for all pupils, as they are at the centre of our approach. This will be evident in the work that they produce, the objectives that are covered and their confidence in applying their understanding to different contexts. Children will have the opportunity to celebrate their progress in assemblies, school social media, themed weeks and celebratory displays. Teachers will have a clear vision of the next steps for each pupil and what their continuing science education will look like. They will feel comfortable in promoting a culture of exploration, coupled with an application of skills with children developing a desire to understand more about the world that we live in

### **Assessment**

Teachers carefully plan for self and peer assessment opportunities within science lessons (See Marking and Feedback Policy).

Teachers assess children's work in science from three aspects (long-term, medium term and short-term). Short-term assessments are used to help adjust daily plans to meet the needs of all pupils. Teachers will assess children's work by making judgements during lessons and by asking planned,

targeted questions to individuals or small groups. These short-term assessments are closely matched to the teaching objectives.

Medium-term assessments are used to measure progress against the key objectives, and to help to plan the next unit of work. Teachers use 'Balance' to keep progress records of all pupils' progress. These records reflect the learning during each lesson. Termly assessments take place using Teacher Assessment and 'Balance'. Long-term assessments are used towards the end of the school year. A full analysis takes place identifying progress and areas for development for all children including specific groups, e.g. gender, ethnicity etc... Children's work is marked according to the agreed school policy. Parents are informed of their child's progress at Parent's Evenings in Autumn and Spring and through annual reports in July.

### **Equal Opportunities and Inclusion**

At Rossmore, we teach science to all children, whatever their ability and individual needs. Science forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our science teaching, we provide learning opportunities that enable all pupils to make good progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities and those with special gifts and talents. We recognise that in all classes, children have a wide range of scientific abilities and ensure that we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. All pupils are included in the daily science lessons and have experience of direct, interactive and lively teaching appropriate for their age and stage of development. Teachers use a mixture of questions directed at the whole class and some questions pitched specifically at particular groups or individuals within the class in order to ensure the involvement of all pupils.

Date of review: September 2024

Date of next review: September 2026