

Sacred Heart Catholic Primary School



Science Implementation

September 2024

Implementation

Our mission statement sums up the expectations fostered at our school to always serve God in all aspects of our daily life. We have a belief in teaching for depth and breadth so that a child can be supported to reach age related expectations in reading, writing and maths.

We use the National Curriculum to ensure every teacher teaches the knowledge and understanding appropriate to that age group. The curriculum has been divided into key skills to ensure there is clarity for the teaching staff. Our Curriculum Maps have been designed to maximise cross curricular links within the curriculum and to ensure consistency and progression.

We value a knowledge led curriculum where we aim to develop children's thinking and reasoning.

Science is taught and planned weekly throughout the year. Planning is informed by and aligned with the National Curriculum, supplemented by the 'Plymouth Science' scheme of work, to ensure every teacher teaches the knowledge appropriate to that age group. The progression of skills in knowledge and understanding and working scientifically are developed through the year groups and scientific enquiry skills are of key importance within lessons. Consideration is given to how children will be challenged within their scientific learning as well as how learners will be supported. The sequence of lessons helps to embed scientific knowledge and skills, with each lesson building on previous learning. There are also opportunities to recap concepts where necessary.

Teachers are provided with time each term to plan their curriculum for the following half term. As part of this planning process, teachers plan for the following:

- A unit introduction, where pupils explore key vocabulary, the broad unit content and recognise the skills previously learned that they will be able to apply in this unit
- A cycle of lessons for each subject, which carefully plans for progression and depth;
- Throughout the unit teachers give pupils feedback either by marking or verbally
- In KS2, an end of unit assessment which is used for formative assessment purposes. This is carried out in a variety of ways eg. Reports, oral presentations, quizzes, a Big Question, 3 facts to share with your parents.
- Educational outings and visiting professionals will enhance the learning experience;

In our school we aim to offer excellence and choice to all of our children, whatever their ability or needs. We have high expectations of all of our children. We aim to achieve this through the removal of barriers to learning and participation. We want all of our children

to feel that they are valued members of our school community. Through appropriate curricular provision, we respect the fact that children:

- have different needs and aspirations;
- require different strategies and resources for learning;
- acquire, assimilate and communicate information at different rates and in different ways;
- need a range of different teaching approaches and experiences.

We believe in 'Quality First' teaching for all children and have a graduated response model of support for pupils (Wave 1,2 and 3) which assists in identifying those pupils who may face challenges within their school journey. Identified gaps are addressed at the earliest opportunity through our assessment system.

Teachers use Science Working Walls that show the current skills, illustrations and key vocabulary to supplement the children's learning. Teachers have ownership over how their Working Wall is used, in order to suit the needs and learning styles of their pupils. Additional displays in classrooms are used to celebrate pupils' learning.

Displays within other areas of the school will celebrate our curriculum and inform pupils, staff and visitors of our learning throughout the year.

Subject Leaders receive training to have a clear understanding of their roles and responsibilities in curriculum design and delivery. They have the knowledge, expertise and practical skills to carry out this role to the best of their ability, closely supported by the Senior Leadership Team. Subject Leaders lead staff meetings to share their expertise in order to develop the confidence of all teachers.

Subject Leaders review the Curriculum Map and Progression Map for their subject area to ensure that skills are built upon year on year and children have opportunities to develop their cognitive memory by revisiting knowledge at different points in the year.

Assessment is used daily in the form of Assessment for Learning. This informs the planning for future lessons and identifies where further individual or group support is needed. Work outcomes are monitored regularly to ensure that they reflect the learning and understanding of the key knowledge and working scientifically skills embedded across the lessons. Within our approach, children are encouraged to ask their own questions and use their skills to discover answers, becoming increasingly more independent as they move throughout the school. SIMS is used to track pupil progress and attainment in RE, Reading, Writing, Maths and Science. Foundation Subjects are assessed termly.

What does this look like at Sacred Heart Catholic Primary School:

- Activities are differentiated so that all children have an appropriate level of support and challenge.
- Using varied teaching methods, adapting to reach all abilities in the classroom.
- Science displays in the classroom to support children's learning.
- Providing pupils with feedback that focuses on the science objectives. Teachers providing regular feedback through marking and class discussion.
- Creating a positive attitude to Science learning and reinforcing an expectation of all children being capable of achieving high standards.
- Setting high expectations which inspire, motivate and challenge all pupils.
- STEM ambassadors to promote science across the school.