Science at Cecil Gowing

Intent

At Cecil Gowing, we know that being curious makes us natural scientists. We want to nurture the natural curiosity, enthusiasm and excitement that children have for the world around them and link it to the big ideas and scientific concepts that help explain our world. We want our children to feel limitless in their aspirations for their futures, aiming high to be engineers, astronauts, physicists, zoologists, doctors and more.

The curriculum at Cecil Gowing has been designed so that lessons are enquiry based and working scientifically underpins the development of scientific knowledge and understanding. Children will acquire and use a broad range of scientific vocabulary which will be revisited and built upon as children move through the school. Alongside this, children will work practically to ask and answer scientific questions. We want the children to develop inquisitive minds, where they explore the world around them. As the children progress, we expect to see them asking scientific questions, thinking of hypotheses, testing their theories, recording results and making conclusions.

As a core subject, science is given the prominence that it deserves at Cecil Gowing. We want to inspire the children by introducing them to real life experts in the fields of Science, Technology, Engineering and Mathematics. By making links to the real world of science our pupils will be inspired and will understand the importance of science on the development of the world around us.

Implementation

At Cecil Gowing, science is taught regularly for years 1 and 2 and in reception through investigation of the world around them within their independent learning.

Teachers use our school vision of inspiring imaginations to create thought provoking, enquiry-based planning underpinned by the objectives set out in the working scientifically section of the national curriculum for science. Current year group topics are used as a stimulus for planning and the curriculum progression document ensures skills are built upon as the children progress throughout the school.

Each learning statement from the national curriculum for science is covered throughout the year with teachers building plans around the objectives for their year group. Vocabulary builds over the year groups and the progression for this is set out in the curriculum progression document.

Each science lesson starts with an exciting and thought-provoking stimulus. This marks the beginning of the scientific enquiry which forms the back bone of each session. The format of the scientific enquiry builds as the children move through the school. By year two, after making an observation, the children think of a question that will lead their enquiry. They then make a hypothesis to try to think of reasonable suggestions to the enquiry question. The next step is to conduct a test, they then record their results and finally make a conclusion.

Memorable learning, including vocabulary, is displayed and is referred back to in subsequent lessons.

Impact

The successful approach to the teaching of science at Cecil Gowing is underpinned by our ethos of inspiring imaginations. Teaching and learning provides children with the foundations for understanding the world that they can take with them once they complete their primary education.

Assessment at Cecil Gowing is teacher based and evidence is recorded either as a class on working wall paper or individually. At the end of each term the class teacher will record individual achievements on pupil asset with some achievements in their curriculum folders.

Through discussions with year teams and visits to science lessons, the science curriculum leader is able to observe the impact and consistency of the teaching of science in all year groups.