

Glendale Middle School Science

Intent

Science is a body of knowledge built up through experimental testing of hypothesis and ideas. Science in our school is about asking and answering “big questions” as a means of developing pupils’ ideas and ways of working. This will nurture a sense of excitement and curiosity about natural phenomena and make sense of the world in which they live through enquiry and investigation. It will also develop and apply skills linked to other curriculum areas and STEM careers.

Implementation

We believe that a broad and balanced science education is the entitlement of all pupils, regardless of background or ability. We use a detailed science topic overview plan to help teachers focus on the most important questions, key knowledge and vocabulary, aiming to:

- Develop pupils’ scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.
- Develop pupils’ understanding of the nature, processes and methods of science through different types of scientific enquiries that help them to answer questions about the world around them.
- Ensure that pupils are equipped with the scientific knowledge required to understand the uses and implications of Science in an increasingly scientific and technological world.
- Develop pupils’ social skills to work cooperatively with others and highlight the international and collaborative nature of science.
- Foster concern about, and active care for, our environment.

Impact

Children at Glendale Middle School are provided with an enjoyable experience of science, so that they will develop a deep and lasting interest and may be motivated to study science further. Through collaborative activities, children develop skills of open mindedness, self-assessment, perseverance and responsibility. This in turn builds pupils’ self-confidence to enable them to work independently. A consistent progression from KS2 to KS3 means that pupils are equipped with the knowledge and skills required for high school and progression to KS4. Pupil work shows that science topics are covered and that work is differentiated where appropriate. Standards in science are high and match standards in other subjects.

Impact is measured through informally assessing the children’s understanding before and after each topic is taught; discussions with pupils throughout each unit and by formal summative assessment at the end of each unit of work. Progress is recorded and used to inform subject data analysis and annual action plans which are shared with SLT.