

Volcanoes & Rocks Enrichment Visit

To enhance and extend our science and geography curriculum, pupils in our mixed Year 3/4 class took part in a highly engaging enrichment workshop delivered by two specialists from the University of Oxford's Earth Sciences Department. The session provided an exceptional opportunity for pupils to consolidate and extend their understanding of rocks, volcanoes, and the processes that shape our planet, offering real-world scientific (and geographic) expertise that enriched classroom learning.

From the outset, pupils demonstrated impressive knowledge recall. They confidently shared what they had learned this term about volcanoes, describing features such as magma chambers, vents, and eruption types with clarity and enthusiasm. Year 4 pupils were also able to retrieve prior knowledge from earlier learning about rocks, accurately identifying igneous, sedimentary, and metamorphic rocks through the memorable rap and accompanying actions they created earlier in the year. This was a significant moment that showcased the effectiveness of our curriculum sequencing and the secure learning pupils have retained over time.

The scientists guided pupils through a practical investigation of volcanic ash and a variety of volcanic rocks. Working collaboratively, pupils examined texture, density, and appearance to determine the origin of each sample and consider what they could infer about eruption intensity and location within the volcanic structure. This hands-on exploration deepened pupils' disciplinary knowledge, encouraging them to think and behave like real scientists - observing, hypothesising, and discussing evidence.

One of the most exciting elements of the morning was the outdoor eruption demonstration. Using small canisters to simulate pressure build-up, pupils observed how unpredictable volcanic eruptions can be in terms of timing, height, and direction. Despite the anticipation and excitement, pupils showed excellent self-control, following safety guidance closely and demonstrating maturity and responsibility throughout.

To further immerse pupils in the world of volcanology, some children had the chance to try on an authentic volcanologist's protective suit. The class also examined a specialist three-fingered glove designed for handling extremely hot materials. These real scientific artefacts helped pupils understand the practical challenges and bravery required in this line of work, broadening their horizons and strengthening their cultural capital.

Impact on Learning

The impact on pupils' learning was clear and significant:

- **Strong Curriculum Retention:** Pupils retrieved prior learning with confidence, demonstrating secure long-term knowledge and the ability to apply it in new contexts.
- **Enhanced Scientific Vocabulary:** Exposure to expert language and practical demonstrations reinforced key terminology, which pupils then used accurately in discussion.
- **Deepened Conceptual Understanding:** Investigating real volcanic materials and observing simulated eruptions strengthened pupils' understanding of geological processes beyond what classroom resources alone can provide.
- **Increased Engagement & Aspirations:** Meeting real scientists and handling specialist equipment inspired curiosity and broadened pupils' awareness of STEM careers. Several pupils expressed interest in learning more about Earth Sciences beyond the lesson.
- **Behaviour & Attitudes:** Pupils conducted themselves impeccably, showing respect, enthusiasm, and a strong desire to learn - an excellent reflection of the school's behaviour culture.

This enrichment opportunity not only strengthened pupils' scientific understanding but also contributed meaningfully to their personal development, curiosity, and confidence. The visit provided a memorable, high-quality experience that will support future learning and remain a highlight of their primary years.

