## <u>Science</u>

## Intent



At Bruche, our Science Curriculum is designed to ignite curiosity and foster a deep understanding of the natural world through exploration. Our curriculum aims to develop students' scientific knowledge, critical thinking and problem-solving skills, preparing them to navigate and contribute to a rapidly advancing technological society. Through Science lessons, students will develop an appreciation of the relevance of science in everyday life and prompt them to discuss and ponder over thought-provoking questions. We seek to nurture a lifelong passion for discovery and innovation, whilst also equipping students with the tools needed to tackle real-world challenges.

## **Implementation**

Our Science Curriculum is implemented through a hands-on, inquiry-based approach that encourages students to actively engage in the scientific process. As such, lessons are designed to be interactive and exploratory, combining theoretical knowledge with practical comparative/fair testing, research, investigations and observations over time.

Students are encouraged to make predictions and provided with opportunities to conduct experiments, analyse data and draw evidence-based conclusions. Through these methods, children will develop an appetite for pattern-seeking and evaluation which will support them as they interpret and analyse more complicated results in KS2 and beyond.

Collaboration plays a pivotal role within Science lessons as children discuss ideas and work as a team to explore the answer to questions. In turn, students develop important teamwork and communication skills. This collaborative approach mirrors real-world scientific research, where scientists often work in teams to solve problems and advance knowledge.

Lessons include cross-curricular themes and projects that connect science with other subjects, such as mathematics, technology and environmental studies. These projects help students see the interconnectedness of scientific disciplines and understand the broader applications of science in solving complex global issues.

## Impact

Our aim is to produce scientifically literate students who are confident, inquisitive and capable of critical thinking. Students will gain a comprehensive understanding of fundamental scientific principles and the ability to apply this knowledge to solve complex problems. The Curriculum fosters a sense of wonder and curiosity, encouraging students to pursue further study and careers in Science, Technology, Engineering and Mathematics (STEM) fields. Ultimately, the Science Curriculum prepares students to contribute meaningfully to the world, with a commitment to innovation, ethical responsibility and continuous learning.