

Science Statement of Intent

To meet the rigorous demands of the national curriculum, while embedding our Faith Inspired, Virtues led approach, our courses have an ambitious design focusing on science through the lens of virtues. It is our intention to take the children through a story of science that imparts the knowledge they need, allows them to develop their understanding through practical experience, to give the independence to design experiments and select from a variety of specialist tools. The curriculum has been designed this way because the order in which discoveries were made is a reflection of the order of complexity of the different scientific principles. Following this historical approach allows us to recognise that the basics are the observations that can be examined and experimented upon ourselves, with the limited equipment and limited understanding we, as a species, began with. This allows us to have a spiral curriculum that builds students up by providing cumulatively sufficient knowledge at each stage of the curriculum solidifying the basics and furthermore providing the skills they need for future learning and employment.

We take a quality first teaching approach to ensure that the content is accessible to all, aiming for the top but carefully scaffolding to the bottom so that all students can receive the appropriate level of support to achieve in our subject. This allows our SEND and other disadvantaged students to perform above the national average.

Reading has been prioritised to allow pupils to access the full curriculum offer. We encourage our students to read around our subjects to have a wider view of the curriculum but also an insight into the lives of the people who have created scientific discoveries.

Students also learn the importance of “writing to instruct” which is a unique aspect of the science curriculum not covered by other subjects. In this, we teach them the importance of clear and concise method writing and foster their skill at reading and carefully following methods safely and precisely themselves.

Our students also have the opportunity to explore science more widely through trips and field work, not only those required by the curriculum but beyond the curriculum to give our students a range of experience of science beyond the classroom and a curriculum enriched by trips, visits and experiences that they might not otherwise have access to allowing us to close the gap between those from disadvantaged backgrounds and those who are not.