

All Saints Science scheme of work - Developing Experts

The Developing Experts curriculum is based on the statutory requirements of the NC and is enhanced by industry experts, who link lesson topics to careers in STEM. The scheme provides intent for each unit and lesson, articulating clear and ambitious targets to each pupil and their teacher. Developing Experts have constructed a curriculum that gradually builds on prior learning, embedding new knowledge into larger concepts. Substantive knowledge is sequenced so that pupils can establish links between concepts from different topics. Connections are made between years and stages so that core scientific principles are regularly highlighted and revisited. The scheme of work shows how substantive concepts are interrelated. For example, the concept of a balanced diet is introduced in Year 2: Growth, whilst Year 6: Animals including humans revisits this learning and connects it to the more complex mechanisms of the human circulatory system.

Units and lessons are sequenced so that new knowledge is built upon prior learning. The curriculum recommends a teaching order which ensures that knowledge is built upon gradually and cumulatively, with recall questions embedded throughout. Progression documents and Curriculum Maps enable teachers to see 'at a glance' that all the NC objectives for both knowledge and skills have been covered and in which unit they are covered.

Expert films are embedded within every lesson to demonstrate how the lesson's knowledge is relevant to the wider world. These experts show the application of the scientific topic within their workplace and showcase potential employment opportunities.

The scheme provides opportunities for teachers to conduct both formative and summative assessments. Formative assessments take place in the starters and plenaries of each lesson - find evidence for this in the presentations or lesson plans. Summative assessments take place via the Unit tests. Progression can be monitored using the before and after tests provided within the Knowledge Organiser documents.

DE present subject matter within a high-quality presentation that appeals to all types of learners. The presentations include Assessment for Learning (AfL) opportunities for pupils to revisit prior learning from previous year groups and lessons. Also within the presentations are further AfL opportunities for teachers to address misconceptions

Before and after tests and rocket word quizzes enable teachers to check understanding and address any conceptual or vocabulary-related misconceptions before, during and following the completion of a unit. Resources are designed to support teachers as they progress through a unit, meaning that feedback can be provided on a regular basis and teaching can be adapted as required.

