Curriculum Intent Statement
Department of Science

Key Stage 3

Students follow content according to the National Curriculum for science using a clear strand-based approach, which reviews and builds on the understanding from KS2. Practical skills are modelled for students with opportunities for students to develop the skills of enquiry and working scientifically.

During Key Stage 3 students will also have the opportunity to experience areas of science beyond the National Curriculum, these are planned to include subjects such as astronomy, psychology, marine biology, geology. Using the expertise of the wider trust, we are able to offer our students the opportunity to experience short programs of study in these areas, with links to science and possible careers.

Key Stage 4

Students experience a wide range of new topics and skills at KS4 whilst following the AQA Trilogy or Triple science specifications. Each topic strand is linked intrinsically to prior knowledge and skills from KS3 and builds in terms of complexity, skills and application. Our aim is that all students should leave Melior Community Academy being able to understand and explain the scientific world around them and more importantly are equipped with the skills to problem solve and critically evaluate the 'big' moral questions.

To support this, the design of **Knowledge Organisers** (KOs) has been carefully planned and aligned to the curriculum narrative. KOs are carefully embedded into the curriculum structure to ensure that this meets the need for improving literacy and provides opportunities for retrieval practice. This also ensures that new key language is introduced, explained and modelled when building on prior learning within each strand. Assessment of students' understanding of the curriculum is constant and low stake. This is done through multiple-choice checkpoints and demonstrate tasks. The aim of this assessment is to feed directly into planning so that lessons are personalised to meet the needs of all students.

Pedagogy	Enrichment	Other general principles
Our pedagogy is underpinned by: • Strand-based approach to teaching, allowing students to revisit content and deepen their knowledge. • Clear modelling of scientific concepts and high quality teacher instruction. • Demonstrate and connect marking which informs planning and addresses misconceptions. • Trust wide assessments and timely intervention. • Using errors as a learning opportunity and building resilience.	We will enrich our curriculum by: • Extended tasks outside of academy, research projects, science clubs, visits to local and national sites of scientific interest. • Encouraging students to become eco-students using the curriculum as a mechanism to enhance awareness of local and global issues. • Continue to develop inter-academy STEM links and STEM clubs. • Continue to build on existing cross-curricular links. • Complete bespoke short POS in areas of interest.	Our curriculum will enable students to: • Learn within a coherent and progressive, strand-based approach allowing students to revisit and move at a more personalised rate. • Develop new skills through a variety of interesting contexts to ensure engagement. • Develop a wide range of practical skills, deepen skills of enquiry. • Improve their social and moral understanding of the world and be able to form reasoned opinions around 'big' scientific questions