

Curriculum Map	Subject	STEM	Year	7
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Unit	Summary	Skills	Assessment	British Values & SMSC	Career links	Cross-curricular links
Dream Big	Students will investigate how Engineering has been used to overcome big challenges in industry. Students will then put these methods into practice to overcome a set of group practical challenges.	Collaboration, Creative thinking, Critical skills, Testing, Development based on data & tests, Evaluating.	Students will be assessed on the short project given at the end of the SOW.	Mutual Respect – working together and respecting everyone in their group equally.	Highway Engineer, Architect, Roller Coaster Engineers	<p>Science: Exploring methods aligns with scientific concepts related to mechanics, materials, and forces.</p> <p>Mathematics: Applying measurements is essential in engineering tasks and problem-solving.</p> <p>Design and Technology: Developing practical solutions to challenges involves design thinking and technological skills.</p>
Space Technologists	Students will examine the needs of the moon and exploration on it and design a suitable moon base for living, sleep, eating and carrying out the required work.	Model making, Collaboration, Creative thinking, Critical skills, Testing, Presentation, Drawing skills, Evaluating.	Students will be assessed on their final moon base design and model.	Social – examining how people live and work together.	Astronomer, Astronaut, Space Technologist, Design engineering, Space Research, Space Architecture	<p>Science: Understanding the lunar environment, space technology, and life support systems involves fundamental scientific principles.</p> <p>Mathematics: Calculations for designing and planning a moon base require mathematical skills.</p> <p>Design and Technology: Creating a functional and sustainable moon base aligns with design and engineering principles.</p>
Developing Sport through STEM	Students will examine how different developments in the STEM industry have helped developed sports in the past and the present.	Creative thinking, Critical skills, Testing, Evaluation.	Students will be assessed on their Sports show design and annotations.	Social – How STEM advances are enabling more people to access a variety of sports.	Design engineer, Sports Engineer: Designing and improving sports equipment and technology. Sports Scientist: Analysing data and using STEM principles to enhance athletes' performance. Sports Biomechanist: Studying human movement and mechanics	<p>Science: Understanding the biomechanics and physiology behind sports performance and injury</p> <p>Mathematics: Analysing sports data, statistics, and calculations related to performance</p> <p>Design and Technology: Developing sports equipment and gear through design thinking and engineering.</p>