



KS3 Curriculum Overview - Design and Technology

Your child will be acquiring new skills, and developing their ability to review, evaluate and refine their set of skills allows students to achieve their full potential. Students should embrace mistakes and failure, challenge concepts and thoughts revolving around a growth mindset. Every student should make progress, demonstrated through their work, engagement and behaviour.

Term	Year 9
Autumn	<p>Creativity</p> <ul style="list-style-type: none"> Innovation - Introductory tasks to inspire students to be creative, take risks and develop concepts focusing on form rather than function. Designer Influences - To design and prototype a new product in the style of a design movement from a 20th Century design movements. A range of card prototypes using the iterative modelling process with allow students to explore a range of manufacturing skills.
Spring	<p>Manufacturing</p> <ul style="list-style-type: none"> Polymer Productions - Students to use recycled polymer sheets to manufacturer a high quality product using a range of polymer processes. The product will use recycled milk bottle focusing on sustainability and the environment. A range of polymer manufacturing methods will be utilised. Materials theory - Students will gain an understanding of a range of materials, their properties and characteristics, linked with practical demonstrations of their uses.
Summer	<p>STEM</p> <ul style="list-style-type: none"> A range of STEM based challenges working in teams to develop a range of skills using maths and engineering to problem solve. Briefed with a problem, students will be given a set of parameters to design and model a solution with a focus on tolerance and precision.

Through the study of Design and Technology your child will be expected to develop the following knowledge, skills and understanding:

Concept / Skill 1	Concept / Skill 2
<ul style="list-style-type: none"> Creativity Innovation 	<ul style="list-style-type: none"> Manufacturing Materials theory understanding

Parents can support their child by questioning the world around them in terms of the products that they use and why they are designed in a certain way. Students can be encouraged to make things in their spare time - anything from a lego model onwards!