

Design & Technology

Director of Learning: Mr D Carter

In Design and Technology, during Key Stage 3, students use a wide range of materials to design and make products. Design and Technology is an inspiring, rigorous and practical subject. Using creativity and imagination, students design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.

Students acquire a broad range of subject knowledge and draw upon cross curricular disciplines such as Mathematics, Science, Engineering, Computing and Art. Students learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present Design and Technology, they develop a critical understanding of its impact on daily life and the wider world.

Students develop their understanding of designing and making by investigating products and finding out about the work of professional designers and the manufacturing industry. They use computer-aided-design software and modern manufacturing techniques (CAD/CAM) as an integral part of designing and making.

In Year 7, students work in six material areas. These are Resistant Materials, Product Design, Engineering, Textiles, Graphics and Cooking & Nutrition.

Teaching aims to ensure that knowledge and understanding from the National Curriculum Programme of Study is applied. Students are taught aspects of the design process such as:

- Research and analysis
- Developing product specifications
- Generating ideas
- Developing ideas
- Project planning
- Making quality products
- Product evaluation and analysis
- Developing technical knowledge

Assessment of students' designing and making capability is carried out by regular interim assessment of aspects of the design process and the products made in all the material areas. In Year 7 students are taught in groups which are based on their 'Numeracy' sets.