

Exam Board: AQA
Qualification: 8552
Assessment Information: 50% Theory Exam (one 2 hour written paper) and 50% Coursework (NEA)

[Link to official specification](#)

Department Information:

The Design Technology department empowers students to explore creativity and innovation through hands-on learning. Our curriculum covers product design, engineering, and Textiles, emphasizing sustainability and real-world applications. With good facilities, we cultivate technical skills and critical thinking, preparing students for future careers in the dynamic field of design.

By integrating these values into the curriculum and classroom culture, we can cultivate well-rounded students who excel not only in Design Technology but in their overall personal development.

ACHIEVE in the curriculum:

Ambitious: We encourage students to tackle complex design challenges that push their creative boundaries. We support students in setting personal and team goals for projects, fostering a growth mindset. Happy: We create a collaborative and supportive classroom atmosphere where students feel comfortable sharing ideas. We regularly recognize and celebrate individual and group successes, big or small. Integrity: We teach students the importance of ethical practices in design, including sustainability and fair sourcing of materials. We encourage students to take responsibility for their work and decisions, promoting honesty in all aspects of the design process. Endurance: We instil a mindset of perseverance by emphasizing the importance of learning from failure and iterating on designs. By implement projects that require sustained effort and commitment, helping students understand the value of endurance in achieving their goals. Versatility: We encourage students to learn and apply a variety of techniques and tools, from digital modelling to hands-on fabrication. We present problems that can be approached in multiple ways, promoting creative thinking and adaptability.

Curriculum Aims & Intent:

Design and Technology will prepare students to participate confidently and successfully in an increasingly technological world. Students will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental and economic factors. Students will get the opportunity to work creatively when designing and making and apply technical and practical expertise.

Resources:

How we keep parents informed:

Year 10 - Progress reports are published 4 times per year, in October, November, March and July, with a face-to-face parents' evening in March.

How parents can help their child:

Extend their knowledge of design. Attend exhibitions, experiment with making, materials and crafts at home, where possible. Talk about products used in everyday life, how are they made, who designed them what are good and bad elements of a design.

What we study and when:					
Term	Unit, Topic Or Summary Of Work Covered	Knowledge, Understanding & Skills Developed	ACHIEVE / Personal Development Focus	How The Work Is Assessed	Careers Links
1	Bird House	Woods theory, isometric drawing. Fabrication of bird house using woods and basic workshop equipment.	Versatility and Endurance	Ideas, mood board, isometric drawing, woods theory and final model.	Carpentry, design evaluation.
2	Toy Project	Thinking out of the box, experimentation with simple mechanisms, links to user centered design. Creativity and avoiding design fixation.	Ambition and Versatility	Ideas and final idea. How does the product fit the user?	Links to product design, user centred design.
3	Clock Project	Simple 2D CAD, work with the laser cutter. Links to designers.	Integrity and Versatility	Final outcome including CAD files.	Links to Designers, CAD and CAM.
4	Torch project	A systems approach to design, simple electronics, soldering. Learn the theory of electronics.	Ambition and endurance.	Finished outcome.	Electronics and a systems approach to design.
5	Camera Project	Create an orthographic projection of a camera, (or other product) Create a detailed card model of the camera. Use card modelling and prototyping skills. Learn the theory of papers and boards.	Endurance and Versatility	Finished outcome of cardboard camera and detailed orthographic drawing. Theory based on papers and boards.	Engineering drawings, manufacturing. Card prototyping and modelling. Set design.
6	Pewter Pendant	Create an simple pendant/keyring using pewter casting. Learn the theory of metals and their working properties.	Integrity and Versatility	Finished outcome including CAD work. Links to a designer or design movement. Metals theory.	Jewellery, metalwork. Casting.