



Design & Technology: Resistant Materials

What will I learn about?

The Edexcel GCSE in Design and Technology – Resistant Materials technology allows students to:

- Make decisions, consider sustainability and combine skills with knowledge and understanding in order to design and make quality products.
- Explore ways in which aesthetic, technical, economic, environmental, ethical and social dimensions interact to shape designing and making.
- Analyse existing products and produce practical solutions to needs, wants and opportunities, recognising their impact on quality of life.
- Develop decision-making skills through individual and collaborative working.
- Understand that designing and making reflect and influence cultures and societies, and that products have an impact on lifestyle.
- Develop skills of creativity and critical analysis through making links between the principles of good design, existing solutions and technological knowledge.

How will my work be assessed?

Component	Overview	Assessment
Examination (50% of your qualification)	<p>The paper includes calculations, short-open and open-response questions as well as extended- writing questions focused on: Analysis and evaluation of design decisions and outcomes, against a technical principle, for prototypes made by others.</p> <p>Analysis and evaluation of wider issues in design technology, including social, moral, ethical and environmental impacts.</p> <p>The paper is split into section A “core” and section B “material” categories.</p>	<p>Exam 1hr 45mins Total of 100 marks Students must answer all questions in Section A (40 marks).</p> <p>Students must choose one specialism in Section B: either Metals, Papers and Boards; Polymers; Systems; Textiles or Timbers (60 marks).</p>
Design & Make (50% of your qualification)	<p>Three contextual challenges will be provided, you must choose one to respond to.</p> <p>You will produce a project which consists of a portfolio and a prototype.</p> <p>There are four parts to the assessment: Part 1: Investigate; Part 2: Design; Part 3: Make; Part 4: Evaluate</p>	<p>Non-examined assessment, internally assessed and externally moderated.</p> <p>Total of 100 marks</p>

Who can I speak to for more information?

For more information about Resistant Materials please speak to Mr Dobson, Curriculum Area Leader: Technology or contact options@penistone-gs.uk.