

Introduction to GCSE Design and Technology (Resistant Materials Technology) (Full & Short Course)

Why study Resistant Materials Technology?

This course will help you to understand and appreciate the design and manufacture of products, making you a more discriminating purchaser. It will help you to be creative in your approach and you will use computers to help with your design ideas and in creating products. You will learn about a range of materials including modern materials and how they respond to changes in temperature, light or pressure. You will gain skills which will be useful in a wide range of jobs, in further study of Design and Technology and in your personal life.

You will study:

- * How to develop a specification for a product (you can decide your own starting point);
- * How to analyse existing products;
- * How to generate a range of design proposals;
- * How to use the Internet to research ideas;
- * Product development and planning;
- * How to select materials and work with tools and equipment;
- * How to evaluate products.

You will:

- * Improve your ICT skills and learn about CAD and CAM;
- * Develop your awareness of consumer requirements of a product;
- * Analyse products and the processes used to manufacture them;
- * Work practically with wood, metal and plastic materials;
- * Learn how to work on your own and as part of a team.

Assessment:

There is a choice between two levels of entry for this examination: Foundation and Higher. At Foundation level the grades available are G-C. At Higher level the grades available are D-A*.

Coursework

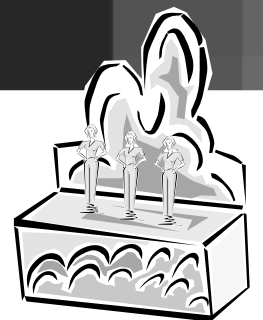
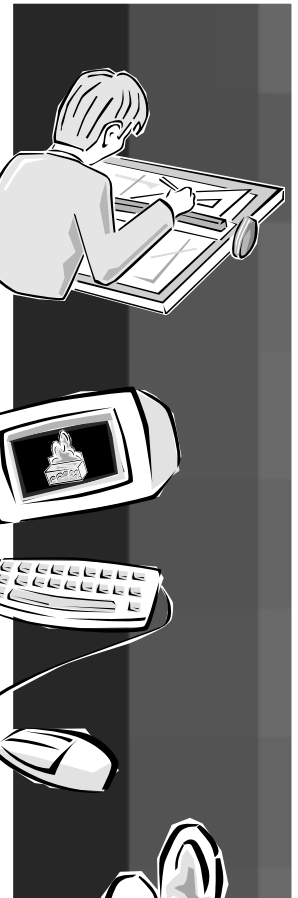
This will be worth 60% of your overall result. You will produce a concise design folio and a 3D product. You will have a free choice of topic. To help you choose, your school will provide lists of suitable topics and your teacher will also help you.

Example: 'Mechanical toys continue to provide interest, humour and fascination for all ages.'

From whatever the starting point, you will be expected to produce a design folio and then make the product in resistant materials. You should aim to complete all this work within 40 hours (20 hours for the Short Course). Your teacher will expect you to show analysis of your ideas, concise and clearly set-out design ideas, a quality manufactured product and an evaluation, which shows you have tested out your design.

Examination

You will answer questions on two papers (one paper for the Short Course), each between 1 and 1 hour 30 minutes long. The questions in these papers are designed to test your ability to design and make quality products.



GCSE

