

# Design Technology

## Key Stage 3 Overview



### What will your child study at Key Stage 3 (Years 7-9)?

All Year 7 students now undertake the Key Stage 3 National Curriculum Baseline Test. This covers the core areas of Design and Technology:

- Graphics
- Resistant Materials
- Systems & Control
- Textiles
- Programming

During Key Stage 3 students use a wide range of materials to design and make products. Within various projects students will work out their ideas with some precision, taking into account how products will be used, who will use them, how much they cost and their appearance. They will develop their understanding of designing and making and expand their practical skills. They will use computers, including computer-aided design and manufacture, as an integral part of designing and making.

### Year 7 Curriculum Overview

7	Resistant Materials	Graphics	Textiles	Food Tech
Topic	Aboriginal Key Ring	Paper and Card	Fabric Juggling Bags	Healthy Salad
Covered	Develop a range of designs influenced by Aboriginal artwork. Produce a finished key ring, incorporating the decorative process of metal etching, which is neatly presented ready for sale.	Produce coasters of own design, complete with packaging.	Basic design skill. Basic hand sewing skills. Fabric decoration; tie-dye / transfer print / machine embroidery. Product construction using basic machine sewing skills and techniques.	Follow a basic process of health, hygiene and safety with in a kitchen environment, gain an understanding to tools and equipment used; along with a variety of fresh ingredients. Working on skills throughout the year, they will build on prior knowledge and produce a healthy Salad for one.

## Year 8 Curriculum Overview

8	Resistant Materials	Graphics	Textiles	Food Tech
Topic	Marionette Puppet	Pop-Up / Mechanisms Project	Soft Toy Frogs	Healty Meal for Two People
Covered	<p>Design and make an animal puppet for local animal welfare charity shop.</p> <p>Puppet should have four legs and will be made from MDF, recycled off-cuts of timber, and a pine handle, constructed using housing joints for cross sections. String and cotton will be used to connect the parts together.</p>	<p>Use paper engineering in order to produce a Pop-Up Card / Page around the work of Robert Sabuda.</p> <p>Follow the basic design process in order to research, design, plan, make and produce their prototype.</p> <p>Introduction into the work of Robert Sabuda and learn about and prototype the basic types of paper engineering mechanisms.</p>	<p>Embellishment techniques – appliqué / hand embroidery / machine embroidery</p> <p>Pattern markings</p> <p>Fabric production and construction skills</p> <p>Developed design and making skills</p>	<p>Learners will research Nutrition used within a balanced diet, Plan and prepare in a hygienic manner a meal for two people, using skills gained. Evaluate their dish using self and peer evaluation techniques.</p>

## Year 9 Curriculum Overview

9	Electronics	Graphics	Textiles	Food Tech
Topic	Alien Project	Board Game Project	Zip Fastening Bag Garment Project	International Cuisine
Covered	<p>Design a product that incorporates flashing eyes. Broad spectrum for some inventive design ideas. The circuit itself incorporates a stable circuit that flashes 2 LEDs alternatively. These can be of any colour and used to add effect to an Alien model made from MDF.</p> <p>Students gain a basic understanding of electronic circuits and how they can be incorporated into to enhance projects.</p>	<p>Design and make a Board Game ready for sale.</p> <p>Follow a more complicated design process (similar to GCSE in order to research, design, plan, make and evaluate their Board Game and its packaging.</p> <p>Develop their understanding of writing a more complex design specification, compliant materials and modelling materials as well as developing a more concise knowledge of CAD/CAM – Corel Draw, Laser Cut.</p>	<p>Technical file demonstrating advanced sewing skills and techniques</p> <p>Zip insertion</p> <p>Lining a product using professional techniques</p> <p>Anthropometrics</p> <p>Wider issues within Textiles production and manufacture; Industrial practises / environmental issues / moral issues / costings / ethical issues</p> <p>Further developed design and making skills</p> <p>Using and understanding commercial patterns</p>	<p>Learners will cover food safety and hygiene, Nutrition and costing of food.</p> <p>They will plan, prepare and cook and International dish for two of their choice and evaluate the dishes.</p>