

ST RICHARD'S CATHOLIC COLLEGE

Design & Technology Department



Staff

Ben Pavey	Subject Leader in Design Technology and Resistant Materials teacher
Brock Prestney-Vaughan	KS4 Co-ordinator and Resistant Materials teacher
Tracey Truss	Food & Nutrition teacher
Marie-Louise Miller	DT Textiles teacher
Adrian Peachment	KS3 Graphics teacher
Support Staff	
Gary Steadman	Technician (part-time)
James Truss	Technician (part-time)

Teaching Groups

In Years 7 and 8 there are ten Technology groups with five groups on each half of the timetable. This means that groups are a manageable size for practical work in all Technology areas with about 21-22 pupils in each group. All groups are mixed ability.

At Key Stage 3, pupils experience all Technology areas on a rotational basis, spending approximately seven weeks in each area. All pupils in this Key Stage experience modules in Food, Graphics, Textiles and Product Design. Over the two years in Product Design, pupils work with plastic, metals and wood. They also experience Computer Aided Design and use of the laser cutter and 3d printers. Thus at the end of the Key Stage, pupils have a very rounded Design Technology experience. In Year 9 we run a rotation system covering Product Design, Textiles, Graphics and Food. Part way through Year 9, choices are made and pupils can decide which area of technology they would like to study in more depth at Key Stage 4. At present we have a Food & Nutrition GCSE and Design Technology GCSE with groups specialising in Resistant Materials and Textiles areas within the DT specification.

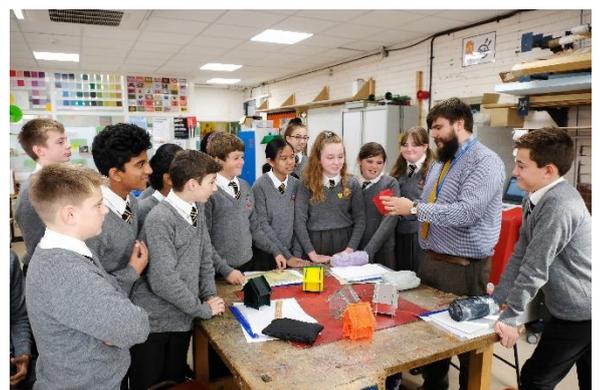
GCSE OUTLINE

For the Current Year 10 into Year 11, our pupils follow specifications in:

SUBJECT TITLE: DESIGN & TECHNOLOGY GCSE

MAIN FEATURES OF COURSE CONTENT

This course offers sound progression from KS3 and provides relevant and interesting content for pupils to study. There will be a focus on producing a prototype and the course allows for a specialised approach in the areas of Resistant Materials or Textiles. At the heart of the subject will be a passion to produce well designed and functioning products. We will also teach a core element of the syllabus through both theory and



learning by doing. Modern technologies such as Computer Aided Design (CAD), 3D modelling, sublimation printing and laser cutting will be key elements.

SCHEME OF ASSESSMENT

- All our specialist areas have the same forms of assessment and an equal workload.
- The only difference will be the chosen material to work in i.e. Resistant Materials or Textiles.

Exam

- One tier entry.
- A written paper worth 50% of the final GCSE mark.
- This is a 2-hour paper and questions range from multiple choice to extended written responses.

Coursework

- A non-examined assessment (coursework) worth 50% of the GCSE mark with a single 'design and make' task selected from a range of 'design and make' tasks.
- Pupils will submit a quality prototype and a design folder.



SUBJECT TITLE: FOOD & NUTRITION GCSE

Food Preparation and Nutrition is an exciting and creative course which focuses on developing practical cooking skills and a strong understanding of nutrition. Pupils learn about British and international culinary traditions. The specification has been organised into the following sections:

- Food preparation skills – twelve skill groups have been identified and practicals are planned around developing these skills. They are: general practical skills, knife skills, preparing fruit and vegetables, use of the cooker, use of equipment, cooking methods, prepare, combine and shape, sauce making, tenderise and marinate, dough, raising agents and setting mixtures.
- Food nutrition and health
- Food safety
- Food science
- Food provenance
- Food choice

SCHEME OF ASSESSMENT

Theory knowledge from the above sections is assessed in a written exam of 1 hour 45 minutes. The exam is worth 50% of the GCSE.

There are 2 Non Exam Assessments (NEA) consisting of:

1. Food investigation task which tests pupils' knowledge of the scientific principles of the preparation and cooking of food. This is a practical research task.

2. Food preparation task: one task to be selected from three offered by AQA. Worth 35% of the total marks. Pupils plan, prepare, cook and present a final menu of three dishes which reflect the chosen task in a final three hour practical. Pupils present a portfolio that explains how they have planned and carried out the preparation, cooking and presentation of the three final dishes.

GCSE BOARD: AQA for both subject areas

KS3

In the current academic year the following modules are being offered:

Year 7

- In Product Design pupils design and make a range of lasercut products specialising in the manufacture of a clock.
- The Graphics class are making aluminium Eames elephants
- In Textiles, pupils learn hand sewing skills and basic construction technique using a template.
- In Food, pupils learn cooking skills and healthy eating, making a variety of products and using different parts of the oven, grill and hob.



Year 8

- The Product Design modules focus on the area of forces and structures, as well as enterprise, marketing and manufacturing of Jewellery and lasercut gifts.
- In the Graphics module, pupils learn formal drawing skills.
- In the Textiles module, pupils learn about textile construction and uses and create weavings.
- In Food, pupils learn to make a range of pasta products with accompanying sauces.



Year 9

- In Product Design, pupils will learn about mechanisms, engaging with a live brief and local clients to produce automata designs.
- In Textiles, pupils investigate the need for design, learning about design briefs and specification in order to create surface print designs.
- In Food, pupils choose a culture and make a final product based on their chosen culture. Pupils are also producing a tea party themed unit learning to bake all the foods we see served at an afternoon tea party.

Homework

At Key Stage 3, homework is set once a fortnight. The type of homework will vary according to the module being experienced. Tasks set for homework may include research, written work, evaluations, questionnaires, learning or even preparation for practical work.

At Key Stage 4, homework is set weekly although there may be occasions when pupils are given slightly longer to complete the work due to the nature of what has been set. Homework at Key Stage 4 will be a part of the learning task that pupils are undertaking at this stage.

Rewards and Consequences

Rewards and consequences within the department follow those used across the school as a whole. In addition to this, we send postcards home. The school has a strong and universally used system of consequences which ensures high standards of behaviour.

Marking

Key Stage 3 marking follows the programmes of study and pupils are awarded scores for both practical and written work at the end of each module. This then enables the department to award an overall score for Design Technology at the end of the year. Formative teacher feedback is a priority for our subject area.

At the end of each module, pupils are asked to assess their own work and to write targets for their next module. The teacher also assesses the pupils' work and sets targets.

Key Stage 4 marking follows the exam board's mark scheme. Pupils have a log book to help with their learning in Year 10. The Non Examined Assessment task takes place in Year 11. The NEA runs for approximately 30 hours and the rest of the academic year is spent embedding examination content.

We are advocates of verbal teacher feedback as a primary method of increasing pupil progress.



Departmental Monitoring

A system of monitoring the department's work is followed by the Subject Leader in conjunction with the department's LMT line manager. The department is also thoroughly monitored termly through the process of Self Review, Action

Planning and Evaluation. This is the responsibility of the Subject Leader, with support from the department.

Department Development

We regularly have trainee teachers within the department and find this rewarding. Formal department meetings happen once a term and are according to the school calendar. The focus is teaching and learning and the moderation of pupil work and progress. We regularly have informal meetings to discuss any issues within the department, for example, sharing teaching tips and strategies.

Examination Results

The examination results are good but we want them to be better. The department is dedicated to pursuing high achievement at all levels. Pupil progress is strong with our SEN and PP pupils performing in line with the cohort.

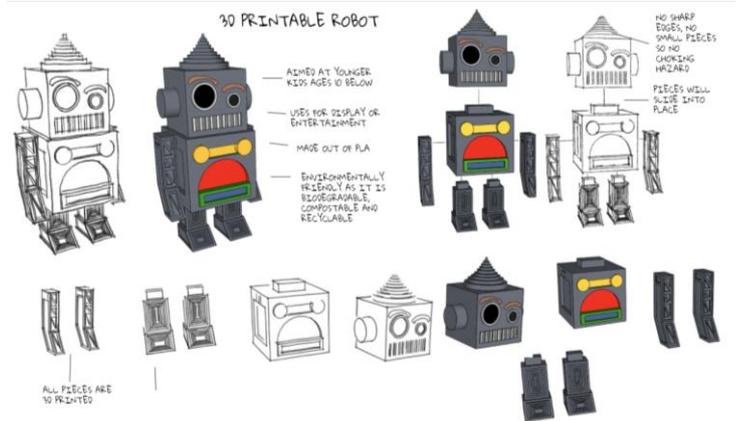


Extra-curricular

The department runs clubs most days after school which have proved very popular with pupils in all year groups. Staff support KS4 pupils regularly during lunch and break times to support the development of their skills in this subject.

We are a happy, positive, kind and caring department who welcome new initiatives, resources and staff.

Examples of Pupils' work



Design and Technology

