

## FITZHARRYS SCHOOL CURRICULUM SUMMARY

# TECHNOLOGY

In Design & Technology we prepare students for today's world so that they may combine practical and technological skills with creative thinking to problem solve, design and make products. The department is well resourced and equipped to deliver the courses and so students have a chance to work with a wide range of materials and equipment.

### **KS3**

In Key Stage 3, the students rotate around a carousel system covering one project each term; they work within each of the Technology disciplines and are taught Food, Textiles, Resistant Materials and Systems and Control. In Years 7 and 8, students are given a design brief every term and they are required to design and make an item that will fulfil the designated focus. These are usually to:

- Respond creatively to briefs
- Generate, develop, communicate and model ideas
- Plan and organise
- Use understanding of others' design
- Reflect on own design (evaluation)

Students are also tested termly.

### **KS4/GCSE**

In Key Stage 4, students opt for either Food Preparation & Nutrition or Design & Technology.

#### DESIGN AND TECHNOLOGY

For Design and Technology, we follow the AQA Specification (8552). This course is made up of two sections: unit 1, which is a written exam, and unit 2 coursework which gives the students a chance to design and make an item from a suggested list of criteria set by the exam board.

Unit 1 covers a wide range of theory that is broken down into Core Technical Principles and Specialist Technical Principles.

Unit 2 focuses on Designing and Making Principles.

Unit 1 Core Technical Principles and Specialist Technical Principles	Unit 2 Designing and Making Principles
1 New and emerging technologies 2 Energy, materials, systems and devices 3 Materials and their working properties 4 Forces and stress 5 Improving functionality 6 Ecology and social footprint	1 Investigation, primary and secondary data 2 The work of others 3 Design strategies 4 Communication of design ideas and prototype 5 Selection of materials and components

7 The 6 Rs 8 Scales of production 9 Paper and boards 10 Timber based materials 11 Metal based materials 12 Polymers 13 Textiles based materials 14 Electronic systems	6 Tolerance and allowance 7 Material management and marking out 8 Specialist tools, equipment and processes 9 Surface treatments and finishes
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Both sections are taught simultaneously as the students are given the opportunity to develop their research and making skills throughout Year 10 so that they can be more focused and independent when doing coursework in Year 11.

### FOOD PREPARATION AND NUTRITION

For Food Preparation and Nutrition, we follow the Eduqas/WJEC Specification (C560P1).

This course is made up of two sections: unit 1 is a written exam worth 50% of the course grade and unit 2 is the coursework which consists of a Food Investigation (15%) and Food Preparation Assignment (35%).

Unit 1 covers a wide range of theory on the principals of Food Preparation and Nutrition.

Unit 2 focuses on Food Preparation and Nutrition in Action.

Unit 1 Core Principals of Food Preparation and Nutrition	Unit 2 Food Preparation and Nutrition in Action	
	The Food Investigation (15%)	Food Preparation Assignment (35%)
1 Food Commodities 2 Principals of nutrition 3 Diet and Good Health 4 The Science of Food 5 Where food comes from 6 Cooking and Food Preparation	1. Research 2. Hypothesis 3. Experiment 4. Analysis of results 5. Evaluation	1. Research Assignment 2. Trial and testing dishes 3. Reasons for choice. 4. Final practical – 3 suitable dishes in 3 hours. 5. Evaluation of results.

All coursework is completed in Year 11 having previously focussed on Unit 1. In Year 11, the Food Investigation is completed in term one and the Food Preparation Assignment is completed in terms two and three. Exam revision is then completed in terms four to six.