

In all areas during Year 10 the focus will be to cover the content of the syllabus and develop their practical skills.

Subject: GCSE DESIGN AND TECHNOLOGY: Product Design

Examination Board: AQA

Full Course

Topics covered:

GCSE Design and Technology will prepare students to participate confidently and successfully in an increasingly technological world. Students will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental and economic factors. Students will get the opportunity to work creatively when designing and making and apply technical and practical expertise.

Design and Technology sets out the knowledge, understanding and skills required to undertake the iterative design process of exploring, creating and evaluating. The majority of the specification will be delivered through the practical application of this knowledge and understanding.

Core Technical Principles

Students will cover a breadth of core technical knowledge and understanding that consists of:

- new and emerging technologies
- energy generation and storage
- developments in new materials
- systems approach to designing
- mechanical devices
- materials and their working properties

Specialist Technical Principles

Students will develop an in-depth knowledge and understanding of the following specialist technical principles:

- selection of materials or components
- forces and stresses
- ecological and social footprint
- sources and origins
- using and working with materials
- stock forms, types and sizes
- scales of production
- specialist techniques and processes
- surface treatments and finishes

Each specialist technical principle will be delivered through at least one material category or system e.g. timber based materials and polymers

Designing and Making Principles

Students will know and understand that all design and technology activities take place within a wide range of contexts.

They should also understand how the prototypes they develop must satisfy wants or needs and be fit for their intended use. For example, the home, school, work or leisure.

They will need to demonstrate and apply knowledge and understanding of designing and making principles in relation to the following areas:

- investigation, primary and secondary data
- environmental, social and economic challenge
- the work of others
- design strategies
- communication of design ideas
- prototype development
- selection of materials and components
- tolerances
- material management
- specialist tools and equipment
- specialist techniques and processes

How it's assessed

Written exam 50%

Time: 2hrs

Section A – Core technical principles (20 marks)

A mixture of multiple choice and short answer questions assessing a breadth of technical knowledge and understanding

Section B – Specialist technical principles (30 marks)

Several short answer questions (2–5 marks) and one extended response to assess a more in depth knowledge of technical principles

Section C – Designing and making principles (50 marks)

A mixture of short answer and extended response questions

Non-Exam Assessment 50%

30–35 hours approx.

Task

Substantial design and make task

Assessment criteria:

- Identifying and investigating design possibilities
- Producing a design brief and specification
- Generating design ideas
- Developing design ideas
- Realising design ideas
- Analysing & evaluating

- In the spirit of the iterative design process, the above should be awarded holistically where they take place and not in a linear manner
- Contextual challenges to be released annually by AQA on 1 June in the year prior to the submission of the NEA
- Students will produce a prototype and a portfolio of evidence
- Work will be marked by teachers and moderated by AQA

National Curriculum Levels achievable in this academic year and brief explanation:

Students will be given a copy of the Grade Descriptions when they start their GCSE Non-Exam Assessment (NEA).

Support Material:

Websites:

www.qca.org.uk/curriculum

www.technologystudent.com

www.ergonomics4schools

www.bsieducation.org

<http://www.mapperleygames.com/Nieuwe%20map/inndex.html>

What you could do to support your daughter:

You could help your daughter by making sure

- she is organised and brings her overall, goggles, folder and materials to the lessons, where appropriate.
- As a safety measure in all areas, if she has long hair it should be tied back in a bun. Fringes also need to be clipped back.
- she uses her planner to help with organisation
- that she is completing her homework encouraging the use of primary research (the world around them, without sole reliance on secondary internet information).
- that in order to build her confidence you encourage her to practise the skills she is learning with us at home.
- you review her achievements with her (refer to the progress page in her Technology booklet) and suggest ways in which she could progress through the GCSE grades.

Your daughter will be given deadlines and information about the content of her controlled assessment at the start of the course. Please ask to see this and help her to plan her time taking into account her other curriculum responsibilities. Workshops will be provided during lunchtimes to enable her to seek additional advice and use specialist facilities.

Subject: GCSE Textiles

Examination Board: AQA

Full Course

Course Structure and Content

The Textiles course gives candidates the opportunity to design and make garments or products and swatches. Textiles can be studied via fashion garments/ costumes, accessories or interiors. Candidates will consider the role of the fashion / interior / textile designer and the various approaches taken to designing products. Students will also study the application of surface decoration and the role of new materials e.g. smart fabrics in the design of garments for contemporary markets. Candidates will use a wide range of equipment and processes, including ICT, in order to realise their designs.

Areas of study

In Component 1 and Component 2 students are required to work in one or more area(s) of textile design, such as; Art textiles fashion design and illustration, costume design, constructed textiles, printed and dyed textiles, surface pattern, stitched and/or embellished textiles, soft furnishings and/or textiles for interiors, digital textiles, installed textiles.

How it's assessed

Unit 1:

Personal Portfolio in Textile Design: Coursework Controlled Assessment: 60%

In Year 10 you will produce a coursework portfolio with themed project work and final outcome pieces. These assignments will be internally moderated throughout the year and externally moderated at the culmination of your GCSE.

Unit 2:

Externally Set Assignment: Examination 40%

This unit represents the culmination of the GCSE course. This externally set assignment will have a broad based thematic starting point, developed through a series of suggested starting points. Students will have a preparatory period followed by a 10 hour examination period.



National Curriculum Levels achievable in this academic year and brief explanation:

Students will be given a copy of the Grade Descriptions when they start their GCSE Non-Exam Assessment (NEA).

Support Material:

Websites:

<http://www.style.com/>
<http://www.vogue.co.uk/>
www.elle.com

What you could do to support your daughter:

You could help your daughter by making sure

- she is organised and brings her folder/portfolio and materials to the lessons, where appropriate.
- As a safety measure in all areas, if she has long hair it should be tied back in a bun. Fringes also need to be clipped back.
- she uses her planner to help with organisation
- that she is completing her homework encouraging the use of primary research (the world around them, without sole reliance on secondary internet information).
- that in order to build her confidence you encourage her to practise the skills she is learning with us at home.
- you review her achievements with her (refer to the progress page in her Textiles folder) and suggest ways in which she could progress through the GCSE grades.

Your daughter will be given deadlines and information about the content of her controlled assessment at the start of the course. Please ask to see this and help her to plan her time taking into account her other curriculum responsibilities. Workshops will be provided during lunchtimes to enable her to seek additional advice and use specialist facilities.

Subject: GCSE Food Preparation and Nutrition

Examination Board: AQA

Full course

Food Preparation and Nutrition equips learners with the knowledge, understanding and skills required to cook and apply the principles of food science, nutrition and healthy eating. It encourages learners to cook and enables them to make informed decisions about food and nutrition and allows them to acquire knowledge in order to be able to feed themselves and others affordably and nutritiously, now and late in life.

The five core topics are:

1. Food, nutrition and health
2. Food science
3. Food safety
4. Food choice
5. Food provenance (where it comes from)

The range of food and ingredients studied should reflect the recommended guidelines for a healthy diet based on the main food commodity groups. Food groups include:

- bread, cereals, flour, oats, rice, potatoes and pasta
- fruit and vegetables (fresh, frozen, dried, canned and juiced)
- milk, cheese and yoghurt
- meat, fish, eggs, soya, tofu, beans, nuts and seeds
- butter, oil, margarine, sugar and syrup.

The following practical skills will be developed

- General 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 making
- Raising agents
- Setting mixtures

Other skills they will learn:

- **Designing your own recipes**
- Carrying out practical experiments
- Making informed choices about ingredients
- Nutritional analysis
- How to present a dish attractively
- Understanding functional and chemical properties of food
- Selecting appropriate cooking methods
- Understanding food and the environment
- Developing recipes and considering special diets/ nutritional needs / target markets

How it's assessed

Written exam 50%

Time: 1hr 45mins

Section A (20marks)

Multiple choice

Section B (80marks)

Questions with written answers

Non examination assessment

50%

Two tasks

Task 1 : Food investigation (15%) 10hrs

Task 2 : Food preparation investigation (35%) 20hrs (Including a 3 hr practical)

National Curriculum Levels achievable in this academic year and brief explanation:

Students will be given a copy of the Grade Descriptions when they start their GCSE coursework.

Support Material:

Websites:

www.nutrition.org.uk

www.foodafactoflife.org.uk

<http://www.deliaonline.com>

<http://www.jamieoliver.com>

<http://uktv.co.uk/food/homepage/sid/423>

<http://www.bbcgoodfood.com>

What you could do to support your daughter:

You could help your daughter by making sure

- she is organised and brings her apron, booklet/folder, containers and ingredients to the lessons, where appropriate.
- As a safety measure in all areas, if she has long hair it should be tied back in a bun. Fringes need to be clipped back also.
- she uses her planner to help with organisation
- that she is completing her homework encouraging the use of primary research (the world around them, without sole reliance on secondary internet information).
- that in order to build her confidence you encourage her to practise the skills she is learning with us at home.
- you review her achievements with her (refer to the progress page in her Food folder) and suggest ways in which she could progress through the GCSE grades.

Your daughter will be given deadlines and information about the content of her non exam assessment at the start of the course. Please ask to see this and help her to plan her time taking into account her other curriculum responsibilities.