

Choose D&T

Who knows where it will lead.....

Architect. Chef. Industrial designer .Engineer. Graphic designer. Web designer. Structural engineer. Fashion designer. Buyer. Magazine editor.

Vivienne Westwood:
Fashion and Textiles Designer



It's a philosophy of life. A practice. If you do this, something will change, what will change is that you will change, your life will change, and if you can change you, you can perhaps change the world.

Vivienne Westwood

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GCSE Design & Technology will now give students the opportunity to study a more material aware course allowing them to design and make a wider variety of products.

You may opt for *either* Textiles **or** Resistant materials however both will end in a GCSE in D&T

Both subjects will sit a written exam worth 50% and complete a Non Exam Assessment worth 50%

When you opt for either area you will focus on the main materials in that area however you will also have the opportunity to learn about the other materials to allow you to answer design briefs using a wide choice of materials and skills learnt.

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Paper 1

What's assessed

- Core technical principles
- Specialist technical principles
- Designing and making principles
- In addition: at least 15% of the exam will assess maths
- at least 10% of the exam will assess science.

How it's assessed

- Written exam: 2 hours
- 100 marks
- 50% of GCSE

Questions

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.

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Non-Exam Assessment (NEA)

What's assessed

Practical application of:

- Core technical principles
- Specialist technical principles
- Designing and making principles

How it's assessed

- Non-exam assessment (NEA): 30–35 hours approx
- 100 marks
- 50% of GCSE

Task(s)

- 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

3 Contextual challenges are 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 related to their chosen context.

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Magazine editor.



Sir Johnathan Ive:

Senior Vice President of
Industrial Design @Apple Inc

*“ By the age of thirteen or fourteen I was pretty certain that I wanted to draw and make stuff. I knew that I wanted to design but I had no idea what I’d design as I was interested in everything: cars, products, furniture, jewellery, boats. After visiting a few design consultancies I eventually decided that **product design** would be a pretty good foundation as it seemed the most general.”*

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How & what will I learn



Designing Skills:

- Formal drawing techniques
- Professional rendering techniques
- Idea generation exercises
- Use of Corel and Google sketch-up (CAD)

Making Skills:

- Focussed practical tasks- hand skills
- Focussed practical tasks- machinery
- Mini projects- interiors household items, charity awareness and promotional tools.
- Use of laser cutter and 3D printer (CAM)

Theory & Knowledge:

- Research projects
- Written reports
- Formal theory lessons
- Focussed practical tasks
- Exam questions

In previous years students have made the following products:

- Coffee tables
- Chairs
- Cupboards
- Book shelves
- Lamps
- Musical instruments including- Guitars & Drums
- Sports equipment
- Disability aids
- Desks
- Games
- Sports training aids
- Radios
- Speakers

How & what will I learn

Designing Skills:

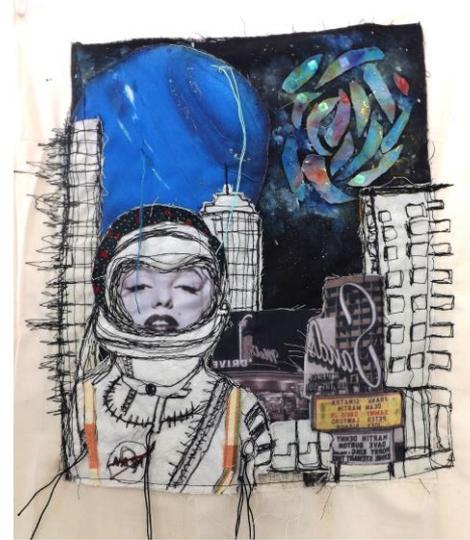
- Formal drawing techniques
- Professional rendering techniques
- Idea generation exercises
- Use of Corel and Google sketch-up (CAD)

Making Skills:

- Focussed practical tasks- hand skills
- Focussed practical tasks- machinery
- Mini projects- Fashion project
- Packaging project
- Interior project
- Print project
- Use of laser cutter and 3D printer (CAM)

Theory & Knowledge:

- Research projects
- Written reports
- Formal theory lessons
- Focussed practical tasks
- Exam questions



Textiles techniques
Sketch pad

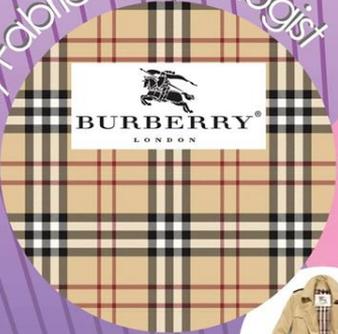


In previous years students have made the following products:

- Seating
- Bags
- Interior furnishings
- Dresses
- Coats
- Sportswear
- Children's toys
- Dog and horse coats



Burberry Fabric Technologist



Ailsa

A Levels in...
Textiles
English
History

Disney Entertainer



Chloe

A Levels in...
Textiles
Chemistry
Biology
Mathematics

M&S Clothing Designer



Laura

A Levels in...
Textiles
English
Geography

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Projects and Progression from Oldbury Wells

*In previous years students
have made the following
products:*

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- Bags
- Interior furnishings
- Dresses
- Coats
- Sportswear
- Children's toys
- Dog and horse coats





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Jewellery Designer
Automotive Design
Entrepreneur
Mechanical Engineer
Civil Engineer
Architect
Product Designer
Set Design
Graphic Designer
Interior Designer

Alan Sugar
Zaha Hadid
Jony Ive
Philippe Starck

Oldbury Wells



Souvenir lamp



Hydro-generator

Skill building
cricket stumps



E-bike trailer



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Jamie Oliver:
Chef and Restaurateur

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“As soon as I was old enough to peer over the worktops, I remember being fascinated by what went on in the kitchen. It just seemed such a cool place, everyone working together to make this lovely stuff and having a laugh doing it.”

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Who knows where it will lead.....

Food Preparation and Nutrition

Paper 1: Food preparation and nutrition

Theoretical knowledge of food preparation and nutrition from Sections 1 to 5.

Written exam: 1 hour 45 minutes

100 marks

50% of GCSE

Questions:

Multiple choice questions (20 marks)

Five questions each with a number of sub questions (80 marks)

Non-Exam Assessment (NEA) worth 50% of GCSE

Task 1: Food Investigation (30 marks) 15%

Students' understanding of the working characteristics, functional and chemical properties of ingredients.

Practical investigations are a compulsory element of this NEA task.

Task 2: Food Preparation Assessment (70 marks) 35%

Students' knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition related to the chosen task.

Students will prepare, cook and present a final menu of three dishes within a single period of no more than three hours, planning in advance how this will be achieved.



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Food Preparation and Nutrition

Written exam worth 50%

Non-Exam Assessment worth 50%

Areas of focus:

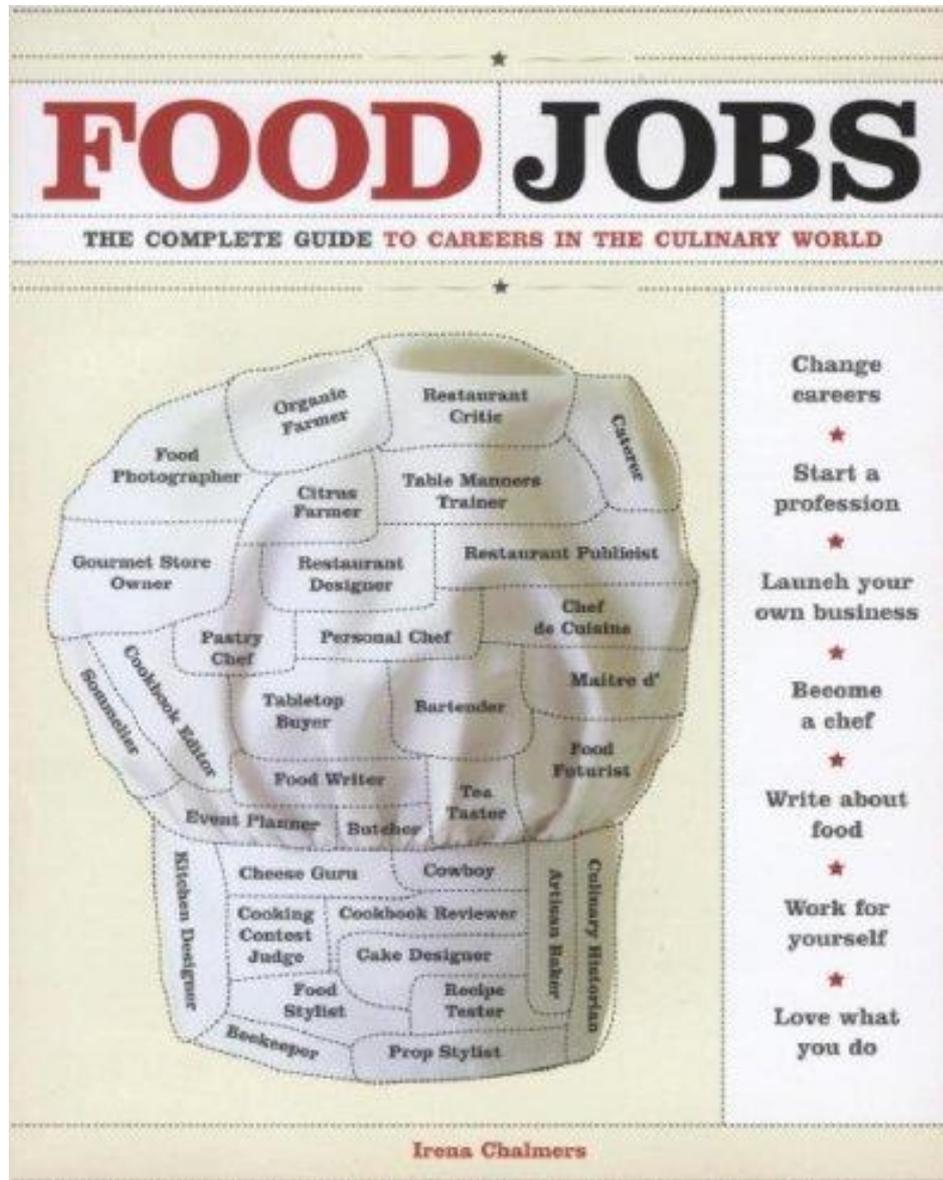
1. Food, nutrition and health
2. Food science
3. Food safety
4. Food choice
5. Food provenance.



Chef or Scientist?

- Projects in Food Preparation and Nutrition
- Develop a wide range of skills whilst making
- Learn about healthy eating and nutrition in both theory and practical
- Carry out science experiments to help understand the science of food

Where could it lead....



- Chef
- Sous chef
- Food technologist
- Food scientist
- Product developer
- Sales
- Restauranter
- Manger
- Food production
- Quality control officer
- Food safety
- Buyer

FOOD SCIENCE

Terms

Ridgwell
2014

www.ridgwellbooks.com

ENZYMATIC BROWNING

Enzymes in fruit and vegetables change taste and colour. For example, apples and bananas turn brown.

Yeast and bacteria break down carbohydrates and sugars.

For example, bread and beer making.

You can find more food terms like these in my book

AERATION

adding air to a mixture to help it rise

for example
meringues and soufflés



Acid is mixed with milk, fish or meat to change it. For example, milk curdles, fish is made into ceviche, and meat is marinated.

COAGULATE

Proteins change with heat and become more solid. For example, egg sets a omelette.

CARAMELISE

Sugar turns brown when heated. For example, to make caramel.

EMULSIFICATION

Two liquids mix together smoothly. For example, mayonnaise.

DEXTRINISATION

Starch changes with dry heat. For example, bread changes to toast, and cakes turn brown.

Key words and concepts: acids, emulsification, coagulate, dextrinisation, emulsify, enzymatic browning, ferment, leaven, gelatinise, gluten, marinate, raising agents, starching and pan-fry, yeast, yogurt.

Enjoy science?

Enjoy cooking?

Then the Food Preparation and Nutrition course is for you!

“Success is not the key to happiness. Happiness is the key to success. If you love what you are doing, you will be successful.”

Albert Schweitzer

Design and Technology education in schools is critical to the UK's future success:

<https://www.youtube.com/watch?v=9BU0wimDxNI>