

## **Subject: Food Technology**

| Year Group:  | 7   |  |
|--|---|--|
| Exam Board:<br>(For years 10, 11, 12<br>and 13 only) |   |  |
| Assessment requirements:                             | Students are assessed for their knowledge, making skills and planning skills.   |  |
| Scheme of work overview:                             | They learn how to use the cooker, and a range of equipment, independently. They are taught safe knife skills.  Also, they learn how to eat healthily, plan and manage their time, weigh foods accurately, and how to evaluate foods using their senses. The focus for their research is the value of eating fruit and vegetables.   |  |
|  | <ul> <li>The main aim of this unit is for pupils to: <ul> <li>Prepare an ordered sequence for managing the task</li> <li>Identify alternative methods of proceeding if first attempts should fail</li> <li>Make safe and hygienic use and choice of equipment and ingredients to prepare and cook products</li> <li>Consider aesthetics when presenting products, i.e. use of garnishes, finishes and moulds.</li> <li>Be aware of different roles within a group and support others (SEAL)</li> <li>Show an understanding of the Eatwell plate and 8Tips for healthy eating, and apply when designing food products.</li> <li>Understand the nutritional, functional and sensory properties of foods and use to them when evaluating food products.</li> <li>Select and use a variety of research sources to support designing.</li> <li>Consider factors that affect food choices.</li> <li>Critically reflect when evaluating design tasks.</li> </ul> </li> </ul> |  |
| Reading materials/resources:                         | Students will need to provide their own ingredients  www.eatwell.gov.uk   |  |

| www.5aday.nhs.uk                          |
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| www.soilassociation.org.uk (why organic?) |
| www.lovebritishfood.co.uk                 |
| www.bbc.co.uk/health                      |
| www.eatseasonably.co.uk                   |
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## **Subject: Resistant Materials**

| Year Group:  | 7   |
|--|---|
| Exam Board:<br>(For years 10, 11, 12<br>and 13 only) |   |
| Assessment requirements:                             | They will be assessed within three different categories.  Design, knowledge and make.   |
| Scheme of work overview:                             | The Maze Project: In Year 7 pupils learn about how to use tools and equipment safely, how to design for a wider audience and about different materials. They produce a range of designs and manufacture a hand held maze using wood, acrylic and the 3D printer. They also complete some research as part of an independent learning project. |
| Reading materials/resources:                         | Access to the internet for images and research.   |



## **Subject: Food Technology**

| Year Group:  | 8  |  |
|--|--|--|
| Exam Board:<br>(For years 10, 11, 12<br>and 13 only) |  |  |
| Assessment requirements:                             | Student will be assessed for three following criteria: Planning and making, knowledge and evaluation.  |  |
| Scheme of work overview:                             | Mega Meals: In Year 8 students continue to develop their food preparation and cooking skills. They learn more about the importance of hygiene & safety and their role in ensuring that food is safe to eat.  The homework research project is about Starchy Foods and encourages the pupils to understand the importance of a  |  |
|  | healthy balanced diet that includes a range of different starchy foods such as pasta, rice, cous cous and potatoes.  The main aim of this unit is for students to:  • Apply knowledge and understanding of materials and techniques  • Work independently to research starchy foods  • Complete a project and extension tasks  • Be able to apply knowledge to choice of practical tasks/ingredients and when designing a sizzling stir fry meal.  |  |
|  | <ul> <li>Students will: <ul> <li>Understand the importance of safety and food hygiene</li> <li>Know about temperature control and the handling of high risk foods.</li> <li>Understand the basic food groups and how to eat a healthy balanced diet.</li> <li>Build on and extend their practical skills to produce a range of dishes based on starchy foods.</li> <li>Be aware of the factors affecting food choice and how to shop wisely.</li> <li>Have a basic understanding of nutritional labelling and date marks on foods.</li> <li>Produce a process plan for making including hygiene, safety and estimate timings.</li> </ul> </li> </ul> |  |
| Reading materials/resources:                         | Recipe books  www.foodafactoflife.org.uk  www.jamieshomecookingskills.com  for researching starchy foods, and encouraging students to cook at home.  Students will need to provide their own ingredients.  |  |



## **Subject: Resistant Materials**

| Year Group:  | 8   |
|--|---|
| Exam Board:<br>(For years 10, 11, 12<br>and 13 only) |   |
| Assessment requirements:                             | They will be assessed within three different categories. Design, knowledge and make.  |
| Scheme of work overview:                             | Speaker Project: In Year 8 pupils learn about electronic components and how to solder. They build an amplifier circuit which they then design and make the housing for.  The main aim of this unit is for pupils to: Learn about basic components and electrical circuits. Learn how to solder components to a circuit board safely and successfully.  Develop their confidence in the workshop and enable them to select and use the correct tools and equipment.  Develop their understanding of Health and Safety in the workshop.  Learn how to design imaginative and creative solutions to a brief and including specific guidelines.  Develop traditional woodworking skills as well as learning about and using CAD/CAM.  The homework project supports and extends what has been taught in the lessons as an independent research project. |
| Reading materials/resources:                         |   |



## **Subject: Food and Cookery**

| Year Group:  | 9   |  |  |
|--|---|--|--|
| Exam Board:<br>(For years 10, 11, 12<br>and 13 only) | NCFE V-Cert   |  |  |
| Assessment requirements:                             | The following design sub skills will be assessed: Applying knowledge and understanding of materials and techniques; Planning, organising and making; Reflecting on own designing.   |  |  |
| Scheme of work overview:                             | Topics: Milk, Dairy, Protein and cooking methods. Design and make a healthy two course meal   |  |  |
|  | <ul> <li>The main aims of the above units are for pupils to:</li> <li>Apply knowledge and understanding of materials and techniques</li> <li>Work independently to research a range of food groups</li> <li>Complete 4 projects and extension tasks</li> <li>Be able to apply knowledge to choice of practical tasks/ingredients</li> <li>Learning a range of skills and modifying each weeks recipe</li> <li>Design a healthy two course meal</li> </ul> |  |  |
|  | <ul> <li>Plan, organise and make: <ul> <li>Plan a two course meal of own choosing</li> <li>Predict time needed and sequence of tasks</li> </ul> </li> <li>Select and work with a variety of ingredients and equipment with some accuracy, paying attention to quality of finish.</li> <li>Practice a broad range of skills to produce meals and single and multiple products.</li> <li>Work both safely and hygienically.</li> </ul>                      |  |  |
|  | Reflect on own designing:   |  |  |
|  | <ul> <li>Understand the main nutrients and how to eat a health balanced diet.</li> <li>Know why people have different dietary needs and the reasons for choosing food types.</li> <li>Build on and extend their practical skills to produce a range of dishes and then choose their own.</li> <li>Have an understanding of nutritional labelling and be able to use nutrition analysis software.</li> </ul>   |  |  |

|                              | <ul> <li>Produce a process plan for making including hygiene, safety<br/>and estimate timings.</li> </ul>  |
|------------------------------|--|
| Reading materials/resources: | Recipe books  www.foodafactoflife.org.uk  www.nutrition.org.uk  www.jamieshomecookingskills.com  Students will need to bring in their own ingredients. |



## **Subject: Resistant Materials**

| Year Group:  | 9 & 10   |
|--|--|
| Exam Board:<br>(For years 10, 11, 12<br>and 13 only) | AQA  |
| Assessment requirements:                             | 50% NEA (Internally assessed) 50% written exam paper (Externally assessed 2 hours)   |
| Scheme of work overview:                             | <b>In Year 9</b> pupils start by looking at the specialist material areas for the D&T GCSE. Making a project in wood, plastic & then metal. Using the skills learnt they apply this to a design and make project which is in a similar style to the GCSE coursework.   |
|  | <b>Clock Project:</b> Pupils work on a very open design brief similar to the NEA they will complete in Yr11. This gives them more freedom when designing and making.   |
|  | Pupils need to be able to work much more independently and apply skills they have learnt in Year 7, 8 and so far in Year 9 Pupils are encouraged to be creative in their designing and ensure their designs are going to stretch their practical skills. They then go on to develop and plan the manufacture of their clocks as each one is unique. Pupils will then select and use the correct tools and equipment to manufacture their clock ensuring that they are working safely at all times. |
|  | <b>In Year 10</b> pupils continue with practical projects to cover the specification such as an electronic dice and a mechanism challenge. They finish the year with another open design & make project in preparation for the NEA.  |
|  | The homework projects throughout encourage research into the specialist material areas in more detail considering the properties and the sustainability of the materials used. It also covers other areas of the specification such as energy storage and industrial production.   |
| Reading materials/resources:                         | AQA GCSE 9-1 Design and Technology Timber, Metal Based Materials and Polymers. Hodder Education  |
|  | www.technologystudent.com Nelson Thorne AQA Design and Technology Resistant Materials  |
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## **Subject: Food and Cookery**

| Year Group:  | Year 10 and 11   |
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| Exam Board:<br>(For years 10, 11, 12<br>and 13 only) | NCFE, V-CERT Level 2   |
| Assessment requirements:                             | 75% Controlled Assessment  |
|  | Unit 1- preparing to cook (25%)  |
|  | Unit 2- understanding foods (25%)  |
|  | Unit 4- exploring balanced diet (25%)  |
|  | Unit 3- 25% written exam paper (2 hours)   |
| Scheme of work                                       | Understand how to prepare self & the environment for   |
| overview:  | <ul> <li>Orliderstand flow to prepare sen &amp; the environment for cooking (hygiene &amp; safety)</li> <li>Understand how to prepare &amp; store equipment &amp; utensils for cooking</li> <li>Understand how to follow recipes for cooking</li> <li>Be able to use skills for food preparation and cooking</li> <li>Understand the sources of food (food groups)</li> <li>Understand factors affecting food choices (social, environmental, cost)</li> <li>Be able to make informed choices when using food for cooking</li> <li>Understand the importance of a balanced diet</li> <li>Be able to change recipes to make them healthier</li> <li>Plan and produce dishes in response to a brief</li> </ul> |
| Reading materials/resources:                         | No specific text book is referred to. We will create an in-house revision book. Students will need to provide their own ingredients  |



#### **Subject: GCSE Graphics**

| Year Group:  | 11   |  |
|--|--|--|
| Exam Board:<br>(For years 10, 11, 12<br>and 13 only) | AQA  |  |
| Assessment requirements:                             | 60% Controlled Assessment<br>40% written exam paper (2 hours)  |  |
| Scheme of work overview:                             | <ul> <li>The Controlled Assessment is assessed as follows:         <ul> <li>Criteria 1 (Investigating the Design Context)</li> <li>Criteria 2 (Development of Design Proposals)</li> </ul> </li> <li>Criteria 3 (Making) completed by February half term</li> <li>Criteria 4 (Testing and Evaluation) completed middle of March</li> <li>The examination is broken down into:</li> <li>Section A: Designing a Graphic product to a pre-determined theme (Distributed March 1st)</li> <li>Section B: Testing the student's knowledge of the Specification eg. Industrial practice, Printing methods, graphic materials, processes, Health &amp; Safety, Quality Control etc.</li> </ul> |  |
| Reading materials/resources:                         | Nelson Thorne GCSE D&T Graphic Products. Available to buy through school and available in the LRC and workshops to use.  SerifDraw X8. Student copy £10 available from school.   |  |



#### **Subject: GCSE AQA Resistant Materials**

| Year Group:  | Year 11  |
|--|--|
| Exam Board:<br>(For years 10, 11, 12<br>and 13 only) | AQA  |
| Assessment requirements:                             | 60% Controlled Assessment (Spilt into 4 Criteria's) 40% written exam paper (2 hours)   |
| Scheme of work overview:                             | Pupils choose from a wide range of briefs from the exam board for their controlled assessment task. Through the Criteria's below they research, design and then make a high quality product such as a light, radio, speaker, gadget tidy or a musical or sporting equipment. This is then tested and evaluated.  Criteria 1 – Investigating the design context Criteria 2- Development of design proposals Criteria 3- Making Criteria 4- Testing and evaluation |
| Reading materials/resources:                         | Available to buy through school and available in the LRC and workshops to use.  Nelson Thorne GCSE D&T Resistant Materials   |



#### **Subject: Product Design – Design and Technology**

| Year Group:   | Years 12 and 13   |
|---|---|
| Exam Board:<br>(For years 10,<br>11, 12 and 13<br>only) | AQA   |
| Assessment requirements:                                | Year 12: New Specification (A2 only: we will not be taking AS)  |
|   | A2  |
|   | <ul> <li>Paper 1:</li> <li>Core technical principles and core designing and making principles</li> <li>Written exam: 2 hours</li> <li>100 marks</li> <li>25% of A Level</li> </ul>  |
|   | Mixture of short, multiple choice and extended response   |
|   | Paper 2:  |
|   | Year 13: Legacy Specification   |
|   | Unit 3 - PROD3 Design and Manufacture 25% of A Level 2 hour written paper 84 marks Based primarily on Design and Manufacture and consisting of two sections Candidates answer three questions: one question from three in each section, plus a final question from either section. Includes synoptic assessment Available June only Unit 4 - PROD4 Design and Making Practice |

25% of A Level

Coursework - approx 60 hours

85 marks

Written (or electronic) design folder

Manufactured outcome

Candidates submit evidence of a simple, substantial designing and

making activity Available June only

## Scheme of work overview:

## Year 12: New Specification (A2 only: we will not be taking AS)

The first year of the 2 year A2 course

- This creative and thought-provoking qualification gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers, especially those in the creative industries.
- They will investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put their learning into practice by producing products of their choice.
- Students will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers

#### **Year 13: Legacy Specification**

For A2 3D Design our Coursework project is to Design and Make an item of seating for a client of the student's choosing. For this we follow the Design Process in detail and cover the full requirements for PROD 4 Designing and Making Practice.

# Reading materials/res ources:

#### **Books:**

#### Year 12: AQA Design and Technology Product Design

Authors: Will Potts, Julia Morrison, Ian Granger, Dave Sumpner

Publisher: Hodder

ISBN-13: 9781510414082

Price: £32.99

Publication date: November 2017

#### **Year 13:**

#### Title: Author(s):

AQA Design and Technology: Product Design (3-D Design). Nelson Thornes. ISBN 978-0-7487-8257-4

Brian Evans & Will Potts.

Cool Hunting Green Dave Evans

The Eco-Design Handbook Alastair Faud -Luke

Design Museum: Contemporary Design Catherine McDermott

Arts & Crafts Companion Pamela Todd

50 Product Designs: Process Jennifer Hudson Designs of the Times Lakshmi Bhaskaran

Bauhaus Benedict Taschen

Making IT Manufacturing Techniques For Product

Design

Chris Lefteri

Memphis Bigitte Fitoussi

The Measure of Man and Women: Human Factors in

Design

Alvin R. Tilley & Henry

Dreyfuss Associates

Drawing For Designers Alan Pipes Designed for Kids Phyllis Richardson

German Design: The classics Bernd Polster

Italian Design Daab

Software: SerifDraw X8 Sketch up