



Year 9

Department of Design and Technology

OVERVIEW

During KS3 students will rotate through 3 subject areas every year: Food Preparation and Nutrition, Product Design and Textiles, spending a term in each.

Through a variety of creative and practical activities, pupils will be taught the knowledge, understanding and skills which will enable them to take their ideas and communicate and clarify them through action.

They will work in a range of relevant contexts for example, the home, school, leisure, culture, enterprise, industry and the wider environment.

They will learn how to generate imaginative and purposeful ideas and translate them into workable solutions.

They will work in a safe and hygienic environment in order to produce high quality products.

Skills Developed

- To work independently to problem solve and consider others needs when designing, adapting or making.
- When making learn to select from and use specialist tools, techniques, processes, equipment and machinery and to use a wider, more complex range of materials, components and ingredients.
- To investigate new and emerging technologies.
- To test, evaluate and refine ideas and products, taking into account the views of intended users and other interested groups.
- To learn about and make use of the properties of materials when making an informed choice about the products they are designing, adapting or making.
- To learn how to cook and apply the principles of nutrition and healthy eating, instilling a love of cooking in pupils. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Topics covered

	<p>Product Design: Design and make a cyber character with a programmable circuit.</p>	<p>The cyber character will be made from wood and the circuit will be soldered and then programmed using PICAXE software.</p> <ul style="list-style-type: none"> • Sketch a range of designs for a cyber character. Using sketches and notes the final design should include the following: decoration, dimensions construction of the stand, methods for attaching the circuit and batteries and the program for the circuit • Soldering and problem solving if circuit doesn't work • Components and their functions in a circuit
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		<p>guide, how to plan and modify recipes, meals and diets to reflect the nutritional guidelines for a healthy diet, the major diet-related health risks.</p> <ul style="list-style-type: none"> • Food science: why food is cooked and how heat is transferred to food, the functions of ingredients. • Food safety when preparing, cooking and serving food. • Food choice: to know and understand factors which may influence food choice, sensory testing methods, how taste receptors and olfactory systems work when tasting food. • Food provenance: where and how ingredients are grown, reared and caught, environmental issues associated with food, sustainability of food and food production.
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How we assess your daughter's progress

- In each area there will 2-3 pieces of work marked according to school policy against a given set of criteria.
- For these pieces of work your daughter is encouraged to respond to her teacher's feedback to show progress. This is often in the form of What Went Well (www) and Even Better If (ebi).
- Practical work is assessed by her teachers but also self and peer assessed.
- Testing of her knowledge is often marked out of a total and stamps used for completion and/or effort.

Year 9 key assessments:

- For each subject area, students' theory knowledge is assessed through an end of term test. Additionally, key assessments include:
 - Food: Special dietary requirements assessment, Cheesecake practical.
 - Product Design: Cyber character design development
 - Textiles: Pyjama designs
- Students will peer and self-mark assessments such as:
 - Food: Practical evaluations, Micronutrients assessment
 - Product Design: Final product of cyber character, booklet exam questions
 - Textiles: Moodboard, Design ideas, Final product.

How we support and develop your daughter

- Your daughter will receive written and verbal feedback regarding her work.
- She will be encouraged to work independently as well as in pairs or as part of a group.
- It will be suggested to her that she 'have a go' before asking for help.
- She will be able to attend lunch time and after school catch up clubs.

How you can help your daughter

You could help your daughter by making sure

- She is organised and brings her overall/apron, goggles, folder and ingredients/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 Teams to check homework and practical assignments.
- 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.
- That you review her achievements with her (refer to the progress page in her Technology booklet).

Support Material:

Product Design:

www.technologystudent.com

www.ergonomics4schools

www.bsieducation.org

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

Textiles:

www.online.org.uk/resources/InformationSheets/Textiles/htm

<http://www.style.com/>

<http://www.vogue.co.uk/>

www.elle.com

Food:

Food a fact of Life website

<http://www.deliaonline.com>

<http://www.jamieoliver.com>

<http://www.bbc.co.uk/food/>

<http://www.bbcgoodfood.com>

Students can also access booklets and resources on SharePoint.