Year 8

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

	Product Design: Design and make a pocket mirror inspired by the Memphis design movement.	The pocket mirror will be made from plastic using at least one of the following manufacturing processes: vacuum forming, line bending, thermo forming or plastic memory. • Design a range of pocket mirror designs inspired by the Memphis design movement. Annotation to help you explain construction details and other interesting comments, Evaluation highlight advantages/disadvantages and any improvements • Develop a design through modelling and testing ideas. Using sketches

		and notes give details of your final design: colour, dimensions, manufacturing process, construction details • Plan of action in the form of a flow chart including quality control checks. • Lifecycle of products and the effects of manufacturing plastic products throughout their lifecycle. • Smart materials and their uses
	Textiles: Design and make a bag which includes an upcycled element and decoration in the theme of endangered species.	• Analysis of the task. • Create an endangered animal moodboard. • Artist Research • Setting up and using the sewing machine and other textiles equipment. • Research into embellishment techniques such as dip dyeing, stencilling and block printing, applique and couching. • Where fabrics come from, how they are made and what we can do to ensure they are sustainable. • Creating a set of criteria to use in the design and development of ideas. Planning, making and evaluating a quality product.
	Food: A continuation of Cooking, Nutrition, Food science and food labelling. Practical work will include Oaty bake, Paella or Risotto, Pasta sauce, Shortcrust pastry, Jamaican Patties or Cornish Pasties, Burgers, Black forest Gateaux cupcakes.	Knowledge and understanding of: • Healthy Eating and nutritional analysis • Scientific properties of ingredients; Proteins, Carbohydrates and Fats • Features and characteristics of cuisines • Where food comes from (Fairtrade) Skill set: • Ability to identify specific types of nutrients within foods and explain the functions in the body.

		• Ability to explain the functions of gluten and fat in the making of shortcrust pastry and define what is meant by shortening. • Ability to read nutrition labels and understand how the figures correspond to DRV's.

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 8 key assessments:

- For each subject area, students' theory knowledge is assessed though an end of term test. Additionally, key assessments include:
    - Food: Use of nutrition to identify macronutrients within a food product and explain the functions.
    - Product Design: Pocket mirror design development
    - Textiles: Art research and swatch samples
- Students will peer and self-mark assessments such as:
    - Food: Practical evaluations, Carbohydrates and Protein assessment, Pastry ingredient functions.
    - Product Design: Final product of pocket mirror, plan of action flow chart, product Lifecyle questions, design ideas, smart materials, tools and test.
    - Textiles: Moodboard, Design ideas, Environmental impact questions, 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.

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