

## **Design & Technology**

### **Year 7 Food and Nutrition**

This course involves the students learning foundation skills and knowledge for the GCSE course for Food Preparation and Nutrition. A written homework is set every week with stretch & challenge questions for higher ability students. The course introduces simple food preparation skills and allows pupils to use basic kitchen equipment.

The main learning in Year 7 involves:

- Safety in the Food room and Basic Hygiene
- The Eat Well Guide & basic Nutrition
- Methods of cooking, the “Cooker License”
- How to wash up & work as a team
- Evaluating food products
- How to make a basic time-plan

Students bring ingredients from home to cook in school every week. They are provided with a school recipe booklet. A demonstration is given by the Food teacher each week. The products made in Year 7 are:

- Coleslaw
- Fruit Salad
- Bolognese
- Risotto
- Flapjacks
- Cup Cakes
- Scones
- Cookies
- Pizza

### **Textiles**

In Year 7 students are introduced to a variety of textile materials and techniques. They will create a series of sample pieces utilising a range of processes and will be taught to safely and effectively use basic joining techniques employing both hand and machine stitching. Embellishment is a key focus of Year 7 and students use print, stitch and dye resist to build up pattern on fabrics and personalise their work.

Students will record and evaluate all this work in a design folder.

## **Resistant Materials**

Students complete two projects in their nine-week rotation. One is a cam toy which introduces the students to mechanisms and associated forms of movement. It also helps to introduce some basic hand tools and use of workshop machinery to build up students' confidence in a workshop environment. The second project sees students create a key-fob. Students develop skills in 2D design and use of laser cutting (CAD/CAM) equipment.

## **Design Technology – Graphics**

Students cover a range of rendering techniques designed to help improve their presentation skills. The students then use these skills to form and design a Fridge magnet on magnetic paper.

## **Year 8 Food and Nutrition**

This course involves the students learning more advanced food preparation skills and more advanced nutritional knowledge. A written homework is set every week with stretch & challenge questions for higher ability students. Mainly savoury products are made, in line with Department for Education guidelines.

The emphasis in year 8 is on

- Nutrition
- Food Labelling laws
- Use of electrical labour-saving equipment
- Hygiene and preventing food poisoning.
- How to create a time plan as needed at GCSE.

Students bring ingredients from home to cook in school every week. They are provided with a school recipe booklet. A demonstration is given by the Food teacher each week. The products made in Year 8 are:

- Burgers
- Simple pasta dish
- Range of sauces (Tomato, Creamy bacon and onion, Cheese sauce)
- Soups
- Swiss roll
- Pasta bake
- Lemon curd
- Cheese straws
- Lasagne

## **Textiles**

In Year 8 students build on the foundation they have studied in Year 7. Advanced stitch and finish techniques will be taught alongside both machine and hand applique. Basic pattern cutting and shaping is also included in this unit of work. Key fibres and fabric knowledge relevant to the core content of the Design and Technology will be covered within their design folder.

Students are expected to show a working knowledge of the techniques learnt in the design and completion of an upcycled Hat/Mask for their personal use.

## **Resistant materials**

Students complete a design folder similar to the GCSE providing them with a good insight into the coursework required at KS4. This folder allows the students to creatively think of an educational toy which meets the 'contextual challenge' design brief from the exam board. Additionally, students make an educational letter toy. This builds on skills learnt in Year 7 and exposes them to different types of finishes and use of the wood turning lathe. The final project completed in Resistant Materials is the use of Autodesk Inventor to produce a digital model of the educational letter toy, exposing the students to 3D modelling and use of the 3D printer.

## **Design Technology – Graphics**

Students complete a number of different drawing types in this rotation which are required learning in the core of the new GCSE Design Technology qualification. These include: isometric, one and two point Perspective, oblique, orthographic and exploded. Students then choose one of these drawing types to complete a quality drawing of an MP3 player design.