

# Technology @ WBS Year 9 Roadmap

**Subject Aim:** To provide a more specialist working environment tailored to student's selection, to give a clear indication and experience of working in a range of environments at GCSE levels to aid GCSE option choices. Students will also continue to learn how to understand their attainment targets through reflection opportunities and work towards improving them.

You will work through 3 rotations you have selected

## TOPIC 1

**Mood Lamp: Product Design:** The project is to design and make a laminated hardwood mood light, in which students will work with hard and soft woods to customise a base for their lamp. The neck will be constructed using a laminating technique which then can be personalised. Students will work on the finish of their product and complete some basic electronics to wire up the lamp. This project is environmentally friendly as it uses a 1W LED for the light and a phone charger as the power source. It's a way of re-using one of the many old phone chargers we all tend to have hidden around the house!

## ASSESSMENT IN YEAR 9

A key assessment sheet at the front of sketchbooks will record their grades, Base Target and Aspirational target.

Students will also be assessed on their class and homework assignments using written and verbal feedback. Peer and self-assessment will take place at a mid-point during the project so students have time to reflect on their feedback to ensure they will meet their base target and are working towards their aspirational grade. This will mainly be based on an Effort grade with E5 as the maximum amount of effort based on their assessed performance and E1 being the least amount of effort. They will also be given an overall level at the end of the project using the GCSE grading scale (9-1).

The Bronze Crest Award assessment will be carried out in accordance with the assessment criteria for the award.

## TOPIC 2

### **Systems and controls: Audio Amplifier**

The electronics project in Yr. 9 is to build an audio amplifier by following detailed instructions and soldering in the relevant components on the circuit board. Once this has been tested to ensure it is fully functional then this product will allow the amplification of the signal through a speaker. Students will then commence work on the casing for the amplifier by personalised one side of the container with an image using sublimation printing onto acrylic, alongside use of the laser cutter to etch designs into the acrylic.

## HOMEWORK IN YEAR 9

Homework plays a very important role in helping students to develop as young designers. Working independently, away from the classroom environment allows students to develop their skills and ideas in a personal way and build an individual approach to their work. Students will be set homework that is relevant to lesson and project content. Research and design work will support classwork. Homework will be celebrated through class critique and class display.

Homework will also be used to assess development towards the base target. The coloured spot system, effort grades alongside written and verbal feedback will also contribute to effective, transparent communication between student, parent and teacher.

## TOPIC 3

### **Textiles: Door stop**

The textiles project allows students to develop creative textiles skills which are used in a number of different forms. Students will select a theme for their project and use a range of decorative techniques to convey their chosen theme in a textile medium.

The creative textiles skills could be batik, applique, trapunto, hand embroidery or quilting to name just a few. Once the sides are completed then

## REVISION FOR ASSESSMENTS IN YEAR 9

Most of the assessment in Technology is based on practical work. Students can prepare for their lessons by listening carefully and making notes during demonstrates of particular techniques. Studying existing products to view how they are constructed and what materials are used.

In Food Technology students can practise their dish at home prior to the lesson to help develop confidence and pace.

construction techniques are followed to ensure a quality product is made.

#### TOPIC 4

**Food: Pastry Project:** During this project students will work towards making a range of products which show development of practical skills and a more independent way of working within a food setting. Students will also develop their understanding of the function of ingredients and nutrition and be able to adapt products to meet particular special dietary needs. Students will develop their ability to cost meals and ingredients and consider the carbon footprint of food items and be aware of Food Provenance.

#### ENRICHMENT THEMES IN YEAR 9

SMSC and British Values: Please see The Creative Designs Department's SMSC Document. Throughout KS3 students will discuss Creative Careers and what skills are linked to real jobs in creative industries. This will be driven in year 9 by exploring designers and crafts people related to the topics being studied and a large range of career materials has been added to teaching PowerPoints to enhance the learning. Cultural Capital: Students will study a wide range of designers from a variety of backgrounds so that they can be encouraged to emphasise and relate to others demonstrating that they can also achieve their aspirational dreams irrespective of their own background. Extracurricular KS3 Technology club exploring a variety of skills will also support this.

#### Topic 5

##### **Graphics: Action figure net Design:**

During this project, students will be able to select a theme for their project and produce suitable character designs for the theme which then can be transferred on to net designs for packaging of an action figure. Students will also consider the importance of fonts when designing nets and use the influence of typography artists to develop their own fonts by using standard graphical drawing equipment. Their fonts will then be added to their nets to further enhance their work.

#### Topic 6

**The Bronze Crest Award** programme of awards (bronze, Silver and Gold) is a certified organisation which brings science, technology and maths together in order to carry out an extended piece of project work. During the project students have the opportunity to develop analytical skills and to show how they have worked through a problem to solve it by coming up with a range of design ideas which they have tried, tested and evaluated in detail before offering a final solution in the material area they have chosen to work in. Students will be able to enter their work for a Bronze Crest Award.

**Where Next? Students can study Product Design, Engineering or Food Preparation and nutrition at GCSE Level. Leading on to Product Design at A Level.**