



# Technology - Year 7



## AUTUMN 1

### Product Design - Basic Skills

Students will be introduced to the workshop, to gain knowledge of health and safety, tools, machinery and how to use these safely. Students will explore a range of tools, materials and process to produce their final outcome of a desk tidy. Ettore Sottsass and Memphis Design movement influence design ideas as well as exploring drawing techniques such as isometric. Students are introduced to CAD / CAM with the use of 2D design and the laser cutter. Knowledge of different type of wood and plastics, and their properties are also introduced to students.

## PRIOR LEARNING

N/A

### Summative Assessment 1

Knowledge assessment - multiple choice questions measuring key concepts and skills. CORE end of project knowledge assessment.

## AUTUMN 2

### Continuation of Basic Skills

N/A

## SPRING 1

### Food Technology – Eat the Rainbow

Year 7 food delivers the foundations skills for cooking and hygiene and safety in preparation to make more complex dishes in year 8 and 9. Students will learn how to make food products safely with the correct equipment in a hygienic environment. The pupils will begin their personal learning journey developing food preparation skills, assembling and cooking skills. This will be accompanied by developing their ingredient knowledge and where our food comes from as well as understanding of the function of the ingredients.

## PRIOR LEARNING

N/A

### Summative Assessment 2

Knowledge assessment - multiple choice questions measuring key concepts and skills. CORE end of project knowledge assessment.

## SPRING 2

### Continuation of Eat the rainbow

N/A

## SUMMER 1

### Textile Design – Basic Skills

Students develop their disciplinary knowledge of a variety of decorative textiles techniques such as embroidery, stencil printing, tie dye and many more, producing a sample of each and collecting this in their booklets. Alongside this, they gain significant substantive understanding of the culture and industrial practices associated with each technique. This project is designed to give students experience of a range of techniques that they can reflect on and develop in later projects.

## PRIOR LEARNING

N/A

## SUMMER 2

### Continuation of basic skills

N/A



# Technology - Year 8



## AUTUMN 1

### Product Design - Environmental Issues

In this project students focus on environmental issues and sustainability, how this affects Product Design and the products that are produced. Students will also learn about product life cycles, planned obsolescence and the impact certain products can have on the environment.

## PRIOR LEARNING

Health and safety, tools and equipment, isometric drawing, 2D design, material properties.

### Summative Assessment 1

Knowledge assessment - multiple choice questions measuring key concepts and skills from Year 7 and Year 8. CORE end of project knowledge assessment.

## AUTUMN 2

Students use environmental influences such as biomimicry as a source of inspiration to design their final outcome, a bird feeder. During the construction of their bird feeder, students will need to use knowledge of materials, tools and machinery, along with traditional joining methods to be able to produce their outcome.

Health and safety, tools and equipment, isometric drawing, 2D design, material properties.

## SPRING 1

### Food Technology – Food Forensics

Students will develop their production skills to a higher level through more complex recipes and products. This skill development will be accompanied by more in depth knowledge of food hygiene and cross contamination to prepare the students for the hospitality and catering industry. Students will build on their working knowledge of how food is cooked and how foods can be sensory analysed.

## PRIOR LEARNING

Health and safety, food hygiene, food safety, eat well guide, sensory analysis, weighing and measuring, prep skills and cooking methods. Seasonal ingredients and food miles.

### Summative Assessment 2

Knowledge assessment - multiple choice questions measuring key concepts and skills from Year 7 and Year 8. CORE end of project knowledge assessment.

## SPRING 2

### Continuation of Food Forensics

As above

## SUMMER 1

### Textile Design – Glasses Case

In this project, students produce a sweet themed textiles glasses case, drawing on their knowledge of decorative textiles techniques from the basic skills project. Textiles artist Holly Levell acts as inspiration for this project. Student combine this with new construction skills and a greater focus on disciplinary skills on the sewing machine. Students also continue to develop their understanding of design processes and the properties of textile materials.

## PRIOR LEARNING

Sewing machine, embroidery, health and safety, fabrics and fabric construction, generating design ideas.

## SUMMER 2

### Continuation of Glasses Glass

As above



# Technology - Year 9



## AUTUMN 1

### Product Design - Iterative Design

Students build upon their knowledge of construction and form developed in year 8. They begin the project by looking at the work of one designer in detail, Dieter Rams and considering how to analyse his work. Students write their own design brief thinking carefully about user centred design, before beginning to explore iterative design techniques to create their own design. They are asked to consider anthropometrics and ergonomics when designing their smart speaker.

## AUTUMN 2

### Continuation of Product Design – Iterative Design

Construction takes them through rapid prototype design processes. Students continued to build knowledge of CAD and CAM before finally creating a final outcome in card. This is a material which allows students to be adventurous with their designs considering organic forms if they wish.

## SPRING 1

### Food Technology – Seasonality and Sustainability

Students will learn how to make sustainable dishes and be able to make informed choices based on their knowledge of food provenance. This module will ensure that students can produce sustainable, nutritious dishes with a good variety of macro and micronutrients.

## SPRING 2

### Continuation of Seasonality and Sustainability

## SUMMER 1

### Textiles – Glasses Case

In this project, students produce a glasses case (gadget case 2025) based on the theme street art. Students develop their design, construction, and decorative technique knowledge. The students will research 3 artists/designers, create observational drawings and sample using the following techniques: mono-printing, batik and hand embroidery. The students will build on their knowledge of the sewing machine and learn construction techniques using seams and a casing (seams and a zip 2025).

## SUMMER 2

### Continuation of Glasses Case

## PRIOR LEARNING

Health and safety, generating ideas, working to a brief, quality control, key designers and design movements.

Health and safety, generating ideas, working to a brief, quality control, key designers and design movements.

## PRIOR LEARNING

Health and safety, food hygiene, food safety, time plans, nutritional knowledge, function of ingredients - chemical, prep skills and cooking methods.

As above

## PRIOR LEARNING

Sewing machine, embroidery, generating design ideas, health and safety.

As above

## Summative Assessment 1

Knowledge assessment - multiple choice questions measuring key concepts and skills from Year 7 and Year 8. CORE end of project knowledge assessment.

## Summative Assessment 2

Knowledge assessment - multiple choice questions measuring key concepts and skills from Year 7 and Year 8. CORE end of project knowledge assessment.