


Design Technology Curriculum Map: Year 7

 Students in year 7 split the academic year between Design Technology and Food Technology

PROJECT 1



HEALTH AND SAFETY INTRODUCTION

Pupils learn about all aspects of safety in the workshop. This involves a tour of the workshop and an introduction to the machinery and tools they may use in KS3.



Identify: Rules of the workshop
Designed to keep all pupils safe.

Pupils produce a 'Rules of the Workshop' poster to demonstrate the knowledge they have gained.

MAZE GAME PROJECT



Students are introduced to using hand tools such as the Tenon saw and also modern processes such as engraving, using the laser cutter. These are vital skills that will serve the pupils well in future projects.



Skills: learn how to use new hand tools when creating your maze game such as a Tenon Saw and a Hand Drill.



Make: Customise your Maze Game to relate to your interests. Create a custom maze which can be as simple or as hard as you choose.

This is the students' first main project in DT. Students take part in all stages of the design process, starting with research, sketching and finally, making their finished Maze Game artefact.



Make: a Big wheel using wood, plastics and other materials.



BIG WHEEL PROJECT

In this project, students further develop their knowledge of structures, by producing a 'Big Wheel'. This project teaches students about using templates and also allows them to customise their wheels, based on their interests.



Skills: Learn to use new heat processes such as the line bender when making seats for your Big Wheel. Students also use the 3D printer to create custom handles for their wheels.



Identify: What makes structures strong and how to use this knowledge when making your own structure.



In this mini project, students learn about the basic principle of structures. Learning takes place using a bridge building exercise, where students put into practice their understanding of strengthening a structure. Students also learn vital teamwork skills during this project.

STRUCTURES MINI-PROJECT



Identify: Ways you can customise your big wheel and make important design decisions.

PROJECT 2



Skills: learn how to work as a team to build your bridges.