



OVERVIEW

In the Technology faculty we develop students into independent problem solvers, by teaching the students how to independently produce bespoke products in response to a given design brief. We base all our learning and assessment around our ethos of Design, Make, Evaluate and Knowledge. Year 7 provides students with an introduction the workshop, workshop principles and materials. Students will work with timbers, polymers, textiles, and graphic products. They will be shown how to use hand tools, workshop machinery and the laser cutter to produce professional products, these skills serve as a skills introduction but also introduces workshop health and safety and working to tolerances which are fundamental to all projects throughout the key stages.

Autumn

Speed Game – timber skills

1. Marking out, origins of timber.
2. Manufacturing Corner halving joint 1
3. Manufacturing Corner halving joint 2
4. CAD (Computer Aided Design) 1
5. CAD (Computer Aided Design) 2
6. Assemble/Evaluate

*Due to the practical nature of the subject, students will receive verbal feedback during each lesson, formal feedback will take place at the end of each project.

Additional Design and Technology theory sessions.

These additional sessions will run for half of the year and classes will then rotate for the other half to complete the project.

These lessons embed the aspects of design and technology theory that are fundamental the success of all projects, these sessions will build up to a formal summative assessment.

1. Mechanisms
2. Structures
3. Metals
4. Timbers
5. Polymers
6. Textiles
7. Design skills
8. Design skills
9. Summative assessment

Assessment:

Design – designing of the playing area of the game.

Make – practical hand tool and workshop machinery skills.

Evaluate – assessing their own work throughout the project and as a final evaluation.

Knowledge – selecting and using hand tools safely and accurately, timber knowledge.

Spring

Maze Game

1. Tie dye - Back stitching
2. Heat transfer - Back stitching
3. Back stitching - Sewing machine.
4. Sewing machine
5. Maze manufacture and templates
6. Assemble/Evaluate

*Self and Teacher assessment through end of unit assessment grid.

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4. Timbers
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6. Textiles
7. Design skills
8. Design skills
9. Summative assessment

Assessment:

Maze Game

Design – playing area of the game and sublimation printing graphic.

Make – textiles hand and sewing machine skills.

Evaluate – assessing their own work throughout the project and as a final evaluation.

Knowledge – selecting and using textiles tools safely and accurately, textiles knowledge.

Summer

Graphic Design – Frisbee Design

1. Initial ideas – sketching
2. Initial ideas – sketching
3. Realising Design Ideas - frisbee
4. Realising Design Ideas – frisbee/ packaging
5. Realising Design Ideas – packaging
6. Assemble/Evaluate

*Self and Teacher assessment through end of unit assessment grid.

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2. Structures
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9. Summative assessment

Assessment:

Frisbee Design

Design –full autonomy of the item’s appearance.

Make – producing the packaging.

Evaluate – assessing their own work throughout the project and as a final evaluation.

Knowledge – selecting and use of typefaces and colour schemes, sustainability, and recycling polymers.

enhanced knowledge of sustainability and recycling polymers.

Useful resources for supporting your child at home:

Excellent design sketching tutorials:
[product designer maker - YouTube](#)

Student access to Focus eLearning – direct link given to students.

Homework:

Homework will be set fortnightly; it will focus on key vocabulary associated with the subject.