



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. In Year 7 Students will be given the opportunity to learn how to use industry standard 3D Computer Aided Design software and 3D print components of a kite that they will manufacture from textiles and timber.

Aut

Sustainable Frisbee design and manufacture.

1. What is Design – Brief, Specification and analysis.
2. Initial Ideas
3. Developing Ideas.
4. Realising Design Ideas
5. Realising Design Ideas
6. Recycling polymers and manufacturing frisbee.
7. Test, evaluate and redesign.

Assessment:

Design – assessment of students designs for the graphical element of the frisbee.

Make – quality of practical skills needed to finish and assemble the frisbee.

Evaluate – how well the student has evaluated their designs, practice and finished product.

Knowledge – they will be assessed on their knowledge of sustainability and the 6R's, graphical interpretation, use of Inkscape.

Spr

Let's Fly a Kite

1. Brief, analysis, specification. Initial Ideas
2. Developing design ideas.
3. Textile's skills
4. Manufacturing the sail
5. Manufacturing the sail
6. Manufacturing the sail
7. CAD – Fusion 360 introduction

Assessment:

Design – the designs for the shape and graphics of the kite. Basic CAD designs in Fusion 360.

Make – quality textiles hand skills, sewing, taping, and cutting.

Evaluate – how well the student has evaluated their designs, practice and finished product.

Knowledge – of technical textiles skills, basic CAD designing and simple aerodynamics.

Sum

Let's Fly a Kite

- 5 CAD – Fusion 360 introduction
- 6 CAD – connectors
- 7 Assemble
- 8 Test, evaluate and redesign.

Handheld maze game

1. Design – Focus 2d Design
2. Design 2
3. Assemble,
4. Test, evaluate.

Assessment:

Design – the designs for the shape and graphics of the kite. Basic CAD designs in Fusion 360.

Make – quality textiles hand skills, sewing, taping, and cutting.

Evaluate – how well the student has evaluated their designs, practice and finished product.

Knowledge – of technical textiles skills, basic CAD designing and simple aerodynamics.

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:

There is no set schedule for KS3 homework, but occasionally there will be a research task, or design skills set by the class teacher.