

GCSE



TO LEARN TO ACHIEVE

DESIGN TECHNOLOGY

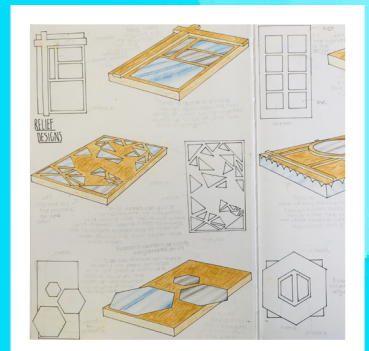
Contact

Please do not hesitate to contact us if you would like to find out more information on Resistant Materials at Bosworth Academy using the contact information below:

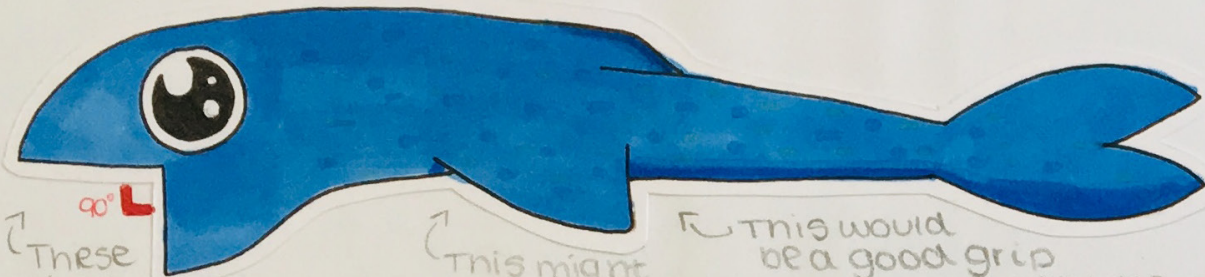
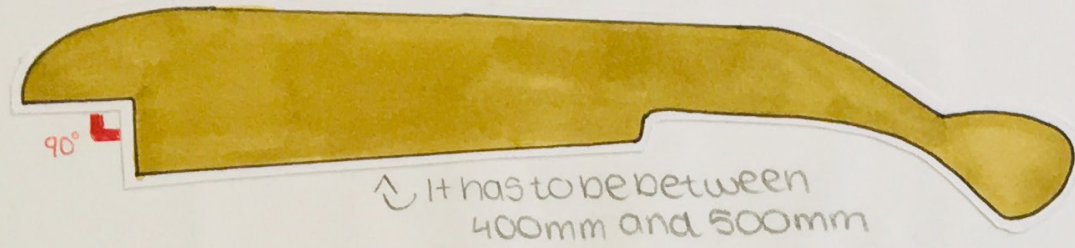
Mrs C Brockhouse (Head of ADT)

Bosworth Academy
Leicester Lane
Desford
Leicester
LE9 9JL

Tel: **01455 822841** Ext: 358
office@bosworthacademy.org.uk



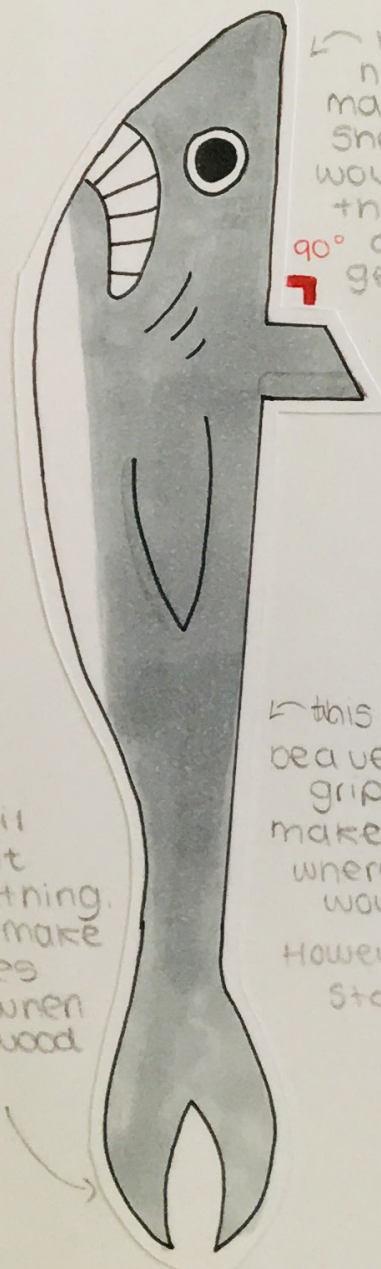
This is the basic structure of a push stick and what my designs will be based on



These would be the same lengths

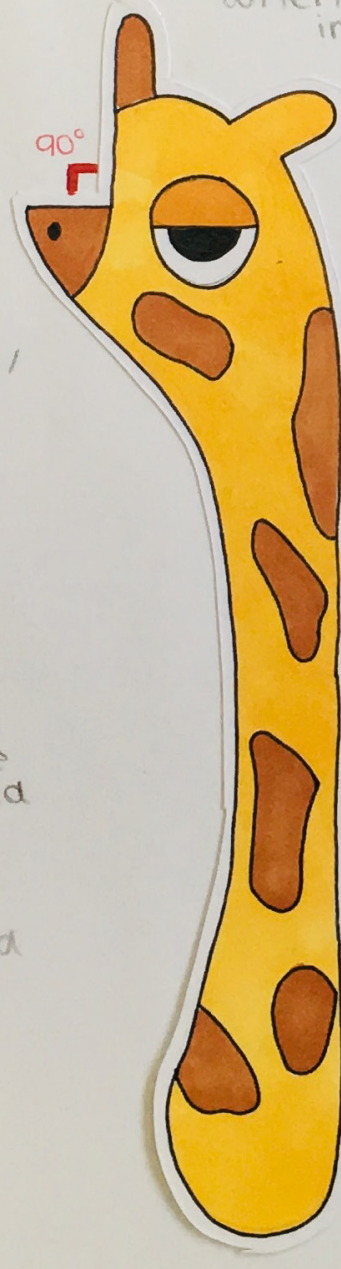
This might catch on materials etc.

This would be a good grip but might be a bit awkward to hold in different areas



I would need to make this shorter if I would make this design, as it might get caught or in the way of the saw blade.

this wouldn't be a very comfortable grip, unless I would make grooves where my fingers would go. However, that would stop



This feature could get in the way and is only for aesthetics, but the character wouldn't look like a giraffe without it

If the tail got caught on something, it would make the lines uneven when cutting wood

GCSE DESIGN TECHNOLOGY

Why Choose Design Technology?

GCSE Design Technology will help students to engage confidently in an increasingly technological world by developing their knowledge and understanding of designing, making, manufacturing, and a wide range of design related issues through both classroom, and practical workshop based study.

What topics will I cover?

You will study a series of core designing and making principles that include:

- New and emerging technologies
- Energy generation and storage
- Developments in new materials
- Electronic systems
- Mechanical devices
- Materials and their properties

You will also develop specialist in-depth knowledge of at least one of the following material areas - paper and cardboard, woods, metals and plastics.

What will my lessons be like?

Design and Technology lessons will use a wide range resources and take place in both classrooms and workshops. Activities take place within a wide range of contexts. You will learn how the prototype products you design and make must satisfy the wants or needs of a target market and function properly as intended. Lessons will also involve:

- Looking into environmental, social and economic challenges and how these affect design.
- Investigating, analysing and evaluating the work of past and present designers and companies to inform your own designs.
- Generating imaginative and creative design ideas using a range of different materials and drawing techniques including computer aided design (CAD).
- Developing design ideas through modelling and working directly with materials and components, such as card, modelling foam, circuit breadboard etc.
- Selecting appropriate materials and components to make a prototype and learn to work accurately using tolerances.
- Selecting and using specialist tools and equipment, including hand tools, machinery, digital design & manufacture, appropriate for the material and/or task to complete quality outcomes.

How will I be assessed?

50% of GCSE - Written exam: 2 hours, you will be tested on;

- Core technical principles
- Specialist technical principles
- Designing and making principles

50% of GCSE - Non-exam assessment (NEA): 30-35 hours approx;

- Major design and make project
- Students will produce a prototype product and a portfolio of evidence
- Work will be marked by teachers and moderated

What might this help me do in the future?

The ability to develop creative solutions out of design problems, analysing needs and evaluating ideas through being reflective are transferable skills to any future study or work.

Following the course students would be well equipped to continue their studies into A Levels or other level 3 courses in 3 Dimensional Design, Product Design and Design Technology. University courses, apprenticeships and careers in this field can include; Product Design, Manufacturing, Engineering, Construction and Architecture.