



The Mall School

Curriculum Guide

Design Technology in Year 4

Fantastic Plastic Key Fob

Teacher: Mr Lang

Lessons: 1x70 minute lesson per week
Homework: None

Acrylic key ring fobs designed and made traditionally using saws, files and drills and then redesigned and made using CAD software and the department's newly purchased laser cutter.

Introduction:

This is the pupil's main introduction to the subject. The boys will initially participate in a discussion of the purpose of the subject and the skills and core values that it is hoped will be instilled in the pupil over the course of their time at The Mall by studying the subject.

Health and safety will be covered and the importance of understanding how to minimise the risk of accidents. The boys will discuss the importance of creativity in the environment around them and how it affects everyday life.

The department has recently benefitted from the purchase of a new laser cutter and the boy's first project will be to compare and contrast both the design and manufacturing process for an acrylic key ring by both the traditional method of using a saw, and file and by using the laser cutter to produce multiple copies of their design.

Key Objectives:

- An awareness of the design process
- An understanding and basic skills in using CAD software
- An awareness of the need for quality workmanship and materials
- Confidence using basic workshop tools and machinery safely
- An ability to co-operate with peers
- An ability to retain and follow instructions accurately
- Evaluation skills

Resources:

The boys will be provided with everything that is required and only need to arrive at lessons with a pencil case and a smile. Though it is always nice to see pupils who have researched ideas at home to inspire their classwork and bring in materials to assist them.