

Multimedia Design and Technology Education

KS3 & KS4
Design and Make Assignment

Signs

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Project Description: Designing and Making a Sign

Students have the choice of starting from a given closed design brief, a given open design brief or they may choose their own context for designing and making a sign.

This booklet contains information that will help students develop their design and technology capability by guiding them through the stages involved in designing a product to meet a need.

Aims

- To develop students' designing capability by guiding them through a design assignment
- To create a detailed, unambiguous design with sufficient information in it for it to be manufactured
- To manufacture a good quality product that matches the requirements of the design.

Objectives

- Students will know that:
 - designs may consist of:
 - a single part, e.g. a wooden spoon (the type used when cooking)
 - a number of parts that work together as a system (e.g. a bicycle)
 - designs may be created by:
 - adding material to the original piece
 - removing material from the original piece
 - bending material
 - reforming material, e.g. by casting metal, extruding polymers etc.
 - cutting up and rearranging material,
 - a combination of any of the above methods
 - movement attracts attention
 - many designs need an element of control
- Students will design and make a sign

Student Activities

Students will:

- work from a closed design brief, an open design brief or identify a need or design opportunity in the context of signs.
- analyse the design brief / the need or design opportunity
- analyse the possibilities
- produce a project plan
- use research methods to find information
- analyse and evaluate existing signs
- evaluate at each step of the designing and making process
- use a range of drawing techniques to record ideas and designs, including:
 - free hand notes and sketches
 - isometric drawings
 - 1 point and 2 point perspective drawing
 - rendering your drawings
 - orthographic drawings
 - parts drawings
 - cutting lists
- use information and communication technology (ICT) to collect, manipulate and present information
- specify the essential features of the design
- solve problems and design the sign
- consider safety when designing so that the finished product will be safe to make, use, maintain, dismantle and recycle.
- design for disassembly; consider the need to dismantle the product and recycle the parts at the end of the product's usefulness.
- produce a design folder for the "sign" design assignment
- plan the making of the sign
- make the sign
- where appropriate, label product parts with the correct recycling symbols.

Likely Outcomes

Signs made from resistant materials that are:

- wall mounted
- hanging
- free standing
- moving
- held in a sign holder that allow signs to be changed