

Kick Starting Engineering Excellence

Graphic Products

Task:

To design a team Identity through car graphics and reflect your sponsors input.

Introduction

Your team needs to have an identity. This is crucial in the world of motor sport. You also need to use sponsor's advertising, that they have paid for, in a proportional manner.

Research Section

What are some of the current designs for your style of car body? What are the names of all of the sponsors that you have to represent on that body?

What materials are used to make car graphics?

Do my sponsors have specific colours and typefaces that we must use? Will the sponsors mind being shown on your car together?

Design Section

Working in conjunction with the body-shell design team and sponsor team; using your entire research material compile the information needed to: -

- 1. Design the background colours to your vehicle
- 2. Design the size, shape, type, colour and position of your graphics

Initial Design

Produce initial designs in two parts on paper. Firstly, the background. This is important, as it will help your car stand out. You can use solid colour, two tone stripes or patterns, or even more complicated shapes. Your design can be simple or complex at this stage.

Once you have done this, you must think about what logos, words and names are going to go onto the car. These must be your sponsors, School and/or team name and anything else that you feel is essential. Don't forget these have to stand out against your background, so be careful when choosing the colours.

Testing Section

If your body shell has been modelled on a CAD package, try to change to surface colour to match your design. This will get you part of the way to seeing what your design will look like.

Using a suitable cad graphics package, design the lettering for the body. You can then print out onto paper or cut them onto vinyl to try out, or to attach onto your car.

Manufacturing

To complete your car design, you can manufacture words and simple graphic shapes in a wide variety of colours using a vinyl cutter (a). This will give you the ability to quickly and accurately produce your designs to a high quality. To finish your background, you may have chosen the correct colour materials to use during manufacture. If not you can use a variety of sprays to achieve you design, using aerosol cans or an airbrush system.

Health and Safety

Carry out a risk assessment for one of the processes that you plan to use. Consider Materials, tools, environment, training, protective equipment and systems, action in case of problems.

If using Aerosol cans, please see specific manufacture's safety instructions on the can and use in a spray booth or well-ventilated area.

Target Areas

KS 3 or 4

Graphics in KS3 and 4 Key skills ICT Product Design Finishing

GCSE Engineering

Unit 1

Specifications and Engineering drawings

Unit 2

Production planning, Choosing materials, Using processes Health and Safety

Unit 3

Investigating Products Key Skills Communication, Number, IT



a. Standard Vinyl Cutter



b. Background Design