

Get warmed up for this challenging A-Level by completing the **four tasks** below. You can work on a computer, by hand, or use a mix of the two. Present all tasks in **one A3 document - hardcopy or softcopy**. (Most students like to use PowerPoint or similar).

### Task 1: Showcase your work

Use this task as an opportunity to showcase your interests and skills related to all things Design and Technology. If you did GCSE DT, include 3-4 of your best pages / slides from your DT coursework. This could include research, design work, prototyping and / or making, but be sure to include photos of your **final outcome!** In addition, (or if you didn't take GCSE DT), include some images to show off your practical, creative and/or technical interests. This could be anything from sketching, building, crafting, engineering, art etc. We hope that this will give us a chance to get to know you as an individual.

### Task 2: Product Analysis

Product analysis is key to understanding how products are made and how they work.

Conduct a detailed analysis of **one** of these two iconic products:

- Dyson DC01 (1993)  
or
- Dieter Rams' SK55 (1963)



Many designers use the mnemonic "ACCESSFM" to help them analyse and evaluate products. On our course, we use an even longer mnemonic: **AACCEESSFMM** because we love detail! 🤓  
These letters stand for:

- **Aesthetics** How the product looks, its shape and form, colour, texture, pattern and finish
- **Assembly** What joints have been used? How has it been put together?
- **Cost** What is the retail price? How does this relate to target market?
- **Consumer / Client** Who is the "user" or "target market"? What could their needs / wants be?
- **Environment** (site) Where will it be used? Indoors or outdoors? Private / public spaces?
- **Eco issues** How environmentally friendly is the product? Use the 6R's to help you.
- **Ergonomics** How comfortable is the product? How easy is it to use?
- **Safety** What safety considerations are there? Does it have any safety features?
- **Size** Is the product for one person or more? Is it adjustable? One size fits all?
- **Function** What will or what does the product do? How does it work?
- **Materials** What materials have been used? What properties do they have?
- **Manufacturing** How has the product been made?

Use key terms above as points as prompts when conducting your product analysis. Where possible, use multiple sources and multiple images from different angles. Include close-ups and drawings of your own to show details of construction.

**Extension task (optional):** Compare and analyse the Dyson DC01 with the Dyson Ball Animal Upright Vacuum Cleaner.

### Task 3: Prototyping and model making

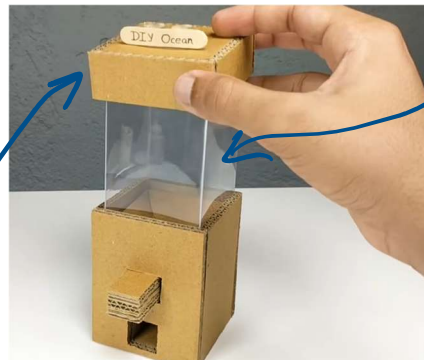
Conveying concepts through models and prototypes is essential to any design process to describe ideas to clients, colleagues and collaborators.

Create a model of a gum ball dispenser using this tutorial: [How to make GumBall Candy Dispenser Machine from Cardboard.](#)

- Document the making of the model using photos, annotations and notes
- Include photos of the final working model from several different angles

Wherever possible, use the same materials as in the tutorial - if you get stuck for materials, raid the recycling bin - be resourceful! **You will need to bring your dispenser in to college for testing during your first DT lesson, so think about how you will transport it safely.**

*use single walled corrugated card for the main body*

*use cereal box card if you cannot source transparent material*

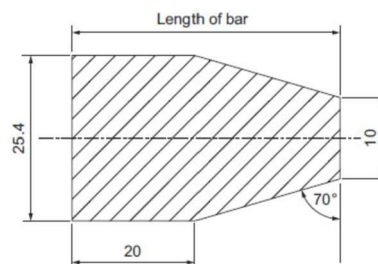
**Extension:** Add styling to your dispenser to make it suitable as a promotional gift for a confectionary brand of your choice.

### Task 4: Theory

We have at least one theory lesson a week that explores different aspects of the design industry, sustainable design, materials, manufacturing, maths skills, H&S, standards and legislation and much more. Complete the following past paper questions.

**01.** Analyse and evaluate the environmental impact of single-use plastic packaging. [12 marks]

**02.** The figure below shows a dimensioned drawing of a length of bar. Calculate the length of the bar. Show your workings. [4 marks]



Not drawn to scale  
All dimensions in mm