BUDMOUTH ACADEMY
WEYMOUTH

Sixth Form Pre-Course Task

Welcome to Product Design

In preparation for you joining us in September, please complete the following pre-course tasks where you will have the opportunity to showcase your prior knowledge, skills and to outline your specific areas of interest within this subject area more widely.

**You can write your responses directly into the boxes provided or type your responses on a separate document.*

TASK 1: Tell us how this subject links to your future aspirations.
For example, this might be the career you'd like to enter into or the apprenticeship/university course you'd like to pursue.

Useful website for careers guidance:

https://www.ucas.com/explore/search/courses?query=
https://www.ucas.com/careers-advice
https://findapprenticeshiptraining.apprenticeships.education.gov.uk/courses
https://uk.indeed.com/
https://nationalcareers.service.gov.uk/

TASK 2- Design:Design a Product That Solves a Real Problem

You'll choose a **real-world issue or challenge** and design a product to help solve it.

Pick **one theme** from the list below (or suggest your own with approval):

- **Sustainable Living**
- **Home Organisation**
- **Inclusive Design (Accessibility for All)**
- **Outdoor Adventure**
- **Study & Workspace Tools**

Part 1: Research & Problem Definition

- Identify a **specific problem or need** related to your theme.
  E.g., "Many people struggle to store and access spices in small kitchens."
- Interview or observe **at least one user** (family member, friend, etc.)
  Note their frustrations, routines, or ideas.

  Include **photos, sketches, or notes** showing how the problem affects them.

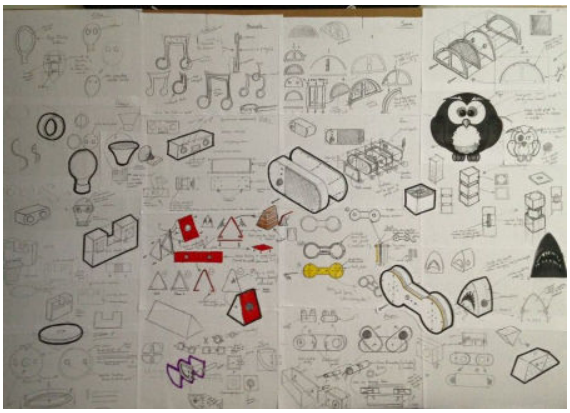
Part 2: Existing Product Analysis

Find **two existing products** that attempt to solve the same or a similar problem.

For each product, include: *How it inspires or informs your design thinking*

- Images
- A short description of how it works
- Pros and cons

Part 3: Initial Concept Sketches



Sketch **two or more design ideas** for your own solution.

- Use hand-drawing or digital sketching

Include:

- Clear labelled diagrams
- Possible materials
- How it works / user interaction
- Sustainability or ergonomic considerations

Tip: Use arrows, callouts, and exploded views to communicate design intent — neatness is good, but clarity is more important than artistic skill!

Initial ideas sheets should be packed with drawings and information

Part 4: Materials & Manufacturing Thought

For one of your design ideas:

- Suggest **3–4 materials** you might use and why (consider sustainability, strength, cost, aesthetics)

  Suggest a **basic manufacturing method** (e.g., 3D printing, CNC, vacuum forming, laser cutting, etc.)

If you have any questions about this course or require any further information on the tasks set above, please contact bmcdonald@budmouth-aspirations.org.

Please note that all pre-course tasks should be handed to your subject teacher by **Friday 11th September**, if these have been typed then please print them out before handing in.

We look forward to working alongside you and seeing all you can achieve on this course.