



SIXTH FORM BRIDGING WORK

Get Ready for *Product Design*



Getting organised: Make sure you have set up a Learning Folder (see Sixth Form file check for content). The PLCs (Personal Learning Checklists) should be at the front.

Subject mind-set and BIG picture thinking...

This creative and thought-provoking qualification gives you the practical skills, theoretical knowledge and confidence to succeed in a number of careers, especially those in the creative industries. You will investigate historical, social, cultural, environmental and economic influences concerned with design and technology, whilst enjoying opportunities to put your learning into practice by producing prototypes with a wide scope for personal choice.

You will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers.

Students should be prepared to work independently outside of lessons to support the taught element of the course. This course may be suitable for those who have not completed a GCSE in Food or equivalent should they have the enthusiasm and be prepared to undertake additional independent study.

A Level Product Design offers exciting and interesting experiences that provide focus through applied learning including projects linked to current local and global contexts.

Creative thinking for a better future!

Please complete the following tasks ahead of starting the Sixth Form:

Work to complete

- 1, Please revise the following areas from your GCSE learning: Properties of materials, woods and manufactured boards.
2. Complete the Design exercise centred on a promotional phone controller product.

Please bring all work to your first lesson.

Recommended text books

- AQA AS and A-level Design and Technology: Product Design, Authors: Will Potts, Julia Morrison, Ian Granger, Dave Sumpner, Publisher: Hodder. ISBN-13: 9781510414082
- The Design of Everyday Things (Don Norman)
- Product Design and Development (Karl Ulrich and Steven D. Eppinger)
- The Fundamentals of Product Design (Richard Demorris)

Recommended websites you should be familiar with

<https://www.aqa.org.uk/subjects/design-and-technology/as-and-a-level/design-and-technology-product-design-7552/specification-at-a-glance>

Related magazines
Design Museum Magazine
Recommended books & revision guides (Download the exam board recommended reading list)
AS/A-Level Design and Technology: Product Design (AQA) My Revision Notes: AQA A Level Design and Technology: Product Design Paperback
Possible places to visit
The Design Museum - London



A Level Product Design Tasks

As part of the Product Design course you will be completing work around different scenarios. Each scenario will be different to the previous, this will enable you to develop problem solving skills as well as developing your practical skills, whilst meeting the teaching and learning requirements of the specification. To prepare for the course, complete these scenarios and start thinking about different situations for which you could design and produce prototypes.

Task 1:

Research/revise the following drawing methods. Find a selection of geometric household items (boxes, cans etc.) and produce a series of sketches for each, using the methods listed.

- Oblique
- Isometric
- Perspective
- Orthographic

Task 2:

Complete the design exercise (attached) based on a mobile device attachment/controller, working through the design stages to ultimately produce prototypes of both product and packaging.

Task 3:

Produce a timeline that explores the following design styles. Include images and notes to explain the styles and the ethos of the movement.

- Arts and Crafts Movement
- Art Deco
- Modernism (including Bauhaus)
- Post-modernism (including Memphis)

Context

- During the shutdown of 2020, people have been using time they would have otherwise spent outdoors, doing other things.
- The technology has been employed in ways that wouldn't have been considered even just a 10 years ago.
- A rise in use of services which don't require people to leave their dwelling has understandably been recorded; companies such as Netflix and Amazon seeing bumper figures.
- Another area seeing increased uptake is that of the App Store and Google Play, with apps like puzzles and other games featuring heavily.

Design Brief

- You will design and make a simple prototype of a games controller which can be attached to a mobile device to make operation easier/more comfortable.
- The product must be capable of holding as many different models of phone as possible; researching the dimensions of several phones will provide a range of sizes.
- The product does not need buttons (like a controller for a games console has) since a modern smartphone touchscreen would provide this functionality.
- The method of attachment could be via a sucker pad or elasticated straps so no complicated moving parts should be necessary. -Complicated mechanisms are just that, complicated; therefore expensive.

Design Brief (continued)

- You are being commissioned to make a product suitable for brand marketing therefore it should be cheap, to be produced in high volume and given away.
- The product should display the brand of the company in some way.
- It should take up a small amount of space (flat things can be stacked to save space)
- Single use plastic is not a sustainable way forward and the client is keen to maintain their environmentally friendly image

Investigation

Look at some other games controllers and so called ‘promotional items’.

- Write out any other important criteria your product should meet?

Research the terms ergonomics and anthropometrics.

- Explain how each of these will factor in your design consideration.

Initial ideas

- Sketch a series of different ideas for a suitable product that meets the brief and any other criteria you see fit*
- Choose your favourite idea/s and (carefully) create a scale prototype/s using a pliant material such as card or corrugated cardboard.
- Take photos of your model/s

*Remember that due to the nature of the brief, this will likely be a flat (ish) product, so sheet materials should be feasible for modelling purposes.

Branding

You are to choose a company you might approach for them to place an order for a batch of your product.

- The company might be relevant to your product field (mobile devices use/gaming), or might not be related and just want to get some brand exposure.
- Their logo is important as it must be something you feel is suitable
- Collect a range of brand logos, noting why you think they are a good fit.

Packaging

Your product is to be packaged for shipping.

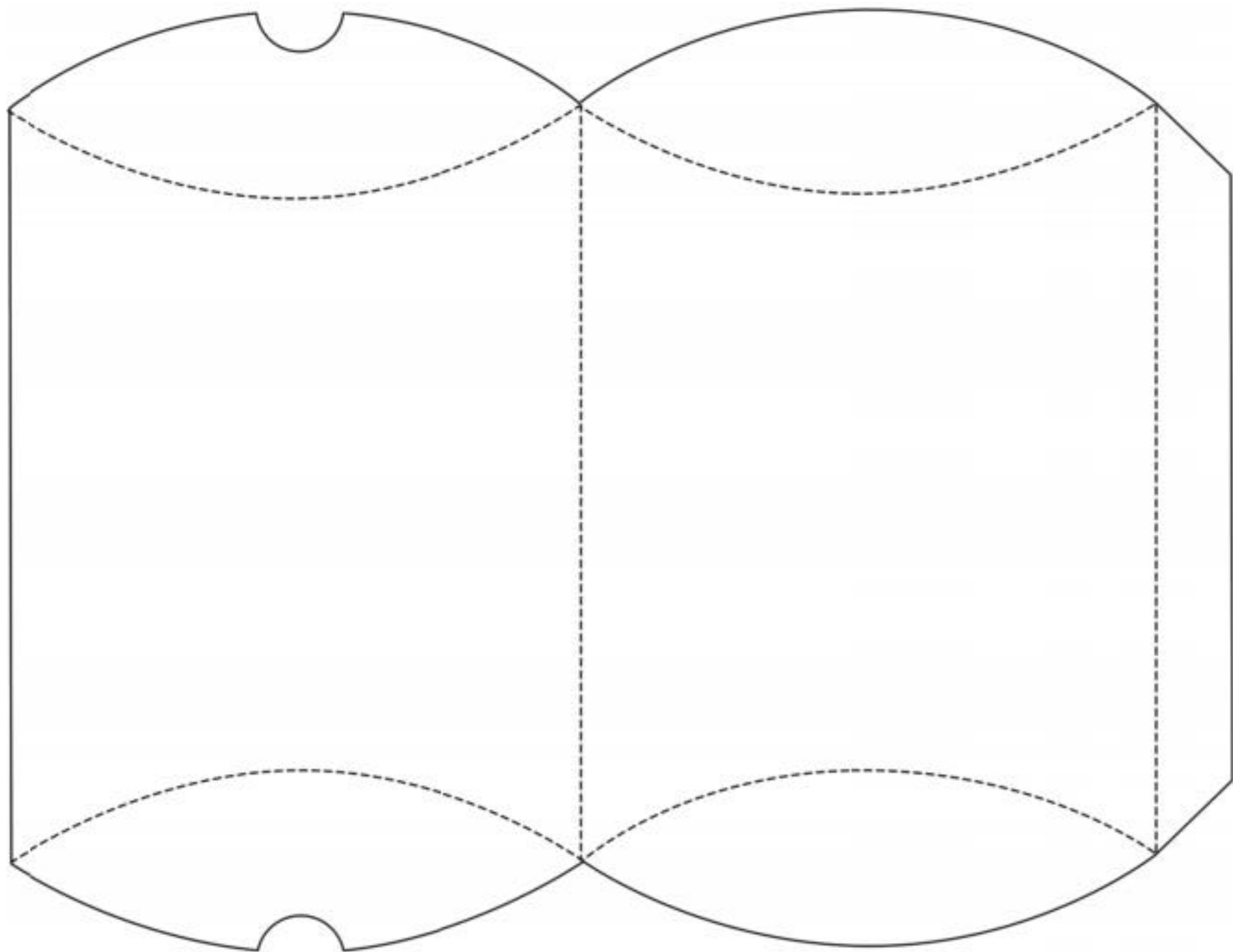
1. Print or copy* the net examples on the following 2 slides.
2. Design some packaging considering a simple net of your choice, and carrying graphics suitable to the company and brand chosen in the previous exercise. There are many ways to do this such as the Hovis bread designs shown.

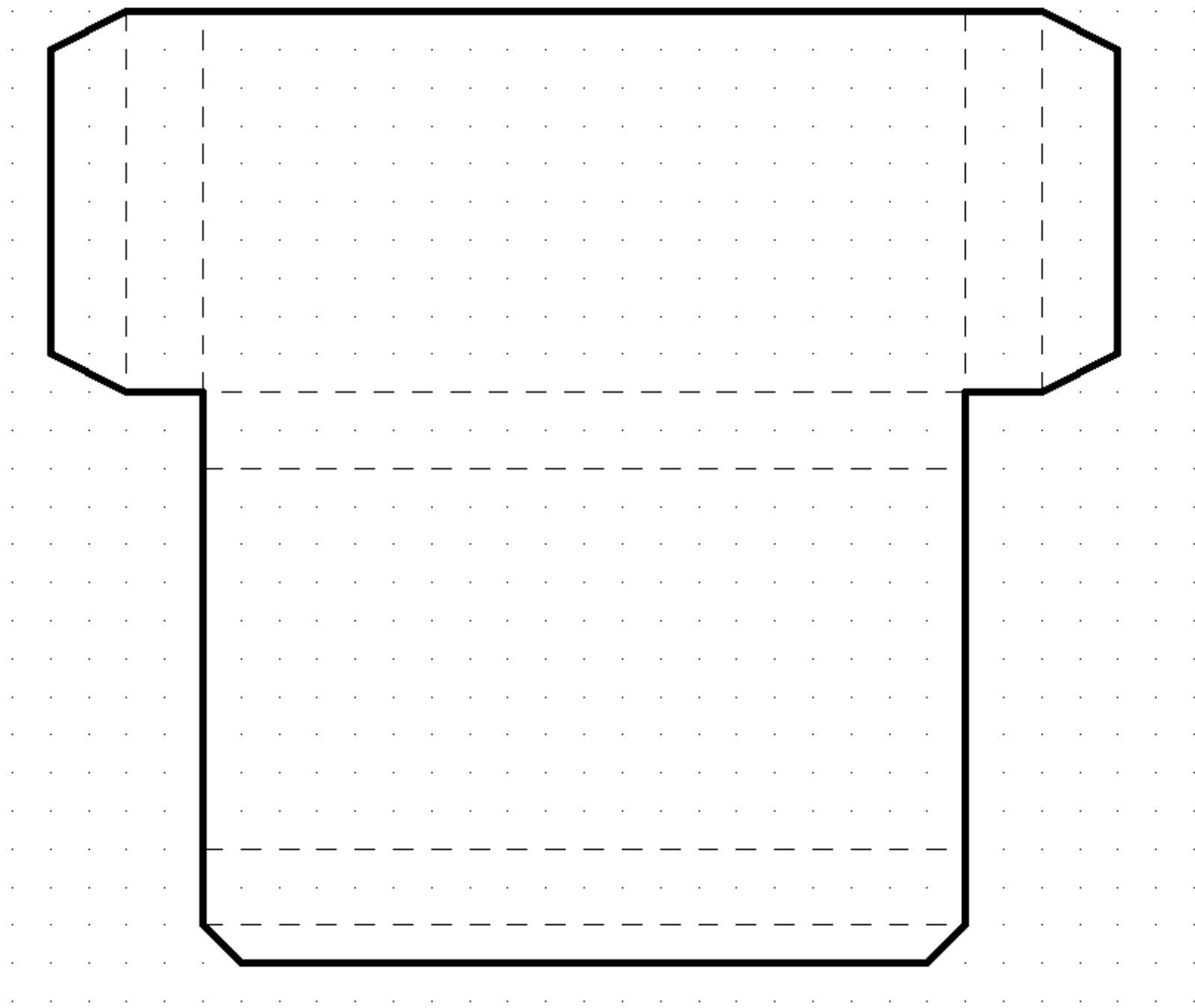


The product is likely to be displayed at trade shows and other point of sale settings (shop countertops etc).

3. Create sketches of possible secondary packaging which could cater for this.

* Your copy doesn't have to be perfect, just close enough to get an idea of the form.





Materials

- Your client will expect any promotional item (and packaging) to be in line with their policy of promoting a sustainable image.
- Research the following eco-labelling and describe ways in which (some of) their ethos might be considered and/or their products employed.

- Forest stewardship council
- The Mobius Loop
- Ellen MacArthur Foundation
- EPA Energy Star

