

# Product Design

## Yr 10 TWILIGHT & Yr 11

### REVISION MATERIAL



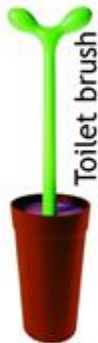
Toilet roll holder



Egg-cup



Pepper mill



Toilet brush

# ALESSI



Dental floss holder



Bath plug



Corkscrew



Egg-cup



Sugar shaker



Butter dish



Set of  
bottle caps



Biscuit box

*(Pre-release material is included)*

## Outline of Coursework, Practical & Exam Paper :

Exam Board :


AQA (Specification Code 4555)

(Coursework and practical combined is worth 60% of the overall mark)

Exam 2hr Paper (40% of overall mark) :

22<sup>nd</sup> June 2018 9:00am (2hrs)

## Pre Release Material :



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**GCSE**  
**DESIGN AND TECHNOLOGY**  
**PRODUCT DESIGN**

Unit 1 Written Paper  
June 2018

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**Preliminary Material**

**Instructions**

- This Preparation Sheet will be given to you on or after 1 March 2018.
- The context for the question in **Section A** of the exam paper is given below.
- Between 1 March and the examination date you will have the opportunity to research the context with the guidance of your teacher.
- **You must not take any Preliminary Material or any associated material into the examination room.**

**Information**

- The Preliminary Material is to be seen by teachers and candidates **only**, for use during preparation for the examination on Friday 22 June 2018. It **cannot** be used by anyone else for any other purpose, other than as stated in the instructions issued, until after the examination date has passed. It must **not** be provided to third parties.

**Context:** Food carriers for leisure activities.

**You will need to collect as much different information based around the topic as you can. This is best collected in the form of a scrapbook.**

## Topics to revise :

- What is Product Design
- Market pull and technological push
- Product evolution
- Continuous improvement
- Design Methodology
- Ideas from other designers
- Ideas from nature and maths
- Environmental issues
- Product life cycles
- Packaging
- Labelling
- Flat packed furniture
- Product maintenance
- Human factors – Anthropometrics and Ergonomics
- Consumer protection
- Using ICT
- CAD/CAM
- Design specification
- Scales of production
- Paper and board
- Timber and manufactured boards
- Metals
- Plastics
- Manufacturing
- Production systems
- Quality assurance systems
- Communication systems
- Casting and moulding
- Forming
- Extrusion
- Bending
- Forging
- Shearing and die cutting
- Sawing
- Chiselling and planing
- Drilling
- Milling and routing
- Turning
- Abrading
- Joining timber
- Welding and soldering
- Joining metals and plastics
- Standard components
- Adhesives
- Surface finishes
- Polishing materials
- Printing

## **Controlled Assessment**

60% of the total marks  
90 marks

A single design-and-make activity selected from a choice of set tasks, consisting of the development of a made outcome and a concise design folder and/or appropriate ICT evidence. These tasks are reviewed every two years.

The design folder should consist of approximately:  
20 pages of A3 paper  
equivalent A4 paper  
or the ICT equivalent.

It is expected that students should spend approximately 45 hours on this activity.

As part of the evidence submitted, students should include photographs of the finished products as well as photographs at various stages of the process.

## **Written Paper**

40% of the total marks  
120 marks  
2 hours  
One paper with two sections:

### **Section A**

30 marks  
A design question based on context supplied before the exam

### **Section B**

90 marks  
Covers all aspects of the specification content  
Answer all questions

## **Exam dates**

Final Exam – 22<sup>nd</sup> June 2018

## **Known intervention sessions**

Exam Intervention sessions are held before each exam. You can also email your teacher below for extra assistance with coursework or additional help.

Mr Ramsden – [david.ramsden@whpfederation.org](mailto:david.ramsden@whpfederation.org)

Ms Sharp – [tracey.sharp@whpfederation.org](mailto:tracey.sharp@whpfederation.org)

Intervention sessions are also held throughout Year's 9 and 10 and 11 for pupils who are underperforming or need extra assistance.

## **Any other information/Revision books/websites**

**AQA GCSE D&T Product Design** - Brian Russell, Nicola Deacon, Andrea Bennett, Jeff Draisey & Krysia Balance

**Lonsdale: GCSE Product Design Essentials Revision Guide** - Ian MacDonald & Brian Russell

**Lonsdale: GCSE Product Design Essentials Workbook** - Ian MacDonald

**Design & Make It! GCSE Product Design Key Stage 4** - Russell & Shephard

**Alessi: art and poetry. . (Cutting Edge)** - Sweet, Fay

**Alessi. . (Design Monographs)** - Collins, Michael

**Alessi: the Design Factory** - Alessi

**Objects of Design from the Museum of Modern Art** - Antonelli, Paola

**Collapsibles: A design album of space-saving objects** - Mollerup, Per

**The dream factory: Alessi since 1921** - Alessi, Alberto

**Packaging design** - Milton, Howard

**Packaging design: graphics, materials, technology** - Sonsino, Steven

**The Sustainability Handbook for Design and Technology** - Practical Action and the Centre for Teachers

## **Independent Learning (Websites etc):**

- [www.technologystudent.com](http://www.technologystudent.com)
- [www.dtonline.org](http://www.dtonline.org)
- [www.bbcbitessize.co.uk](http://www.bbcbitessize.co.uk)

## **Revision Material:**

- AQA Product Design Revision Guide