



AQA Product Design Year 11 GCSE (Design & Technology)



NEA & Exam Theory

You will be studying AQA Product Design GCSE. The course comprises of 1 exam (2 hours) sat May/June and an NEA assessment:

Section A – Core technical principles (20 marks)

Section B – Specialist technical principles (30 marks)

Section C – Designing and making principles (50 marks)

For further information, past papers and examiners reports, visit: (<https://www.aqa.org.uk/subjects/design-and-technology/gcse/design-and-technology-8552>)

Key topics include:

- ✓ As part of the exam at least 15% of the exam will assess maths and at least 10% of the exam will assess science
- ✓ **Section A – Core technical principles (20 marks)** - A mixture of multiple choice and short answer questions assessing a breadth of technical knowledge and understanding
- ✓ **Section B – Specialist technical principles (30 marks)** - Several short answer questions (2–5 marks) and one extended response to assess a more in depth knowledge of technical principles
- ✓ **Section C – Designing and making principles (50 marks)** A mixture of short answer and extended response questions.



Assessment:

The Exam is worth 50% of your overall GCSE grade



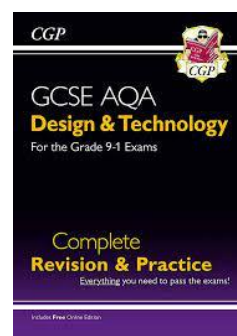
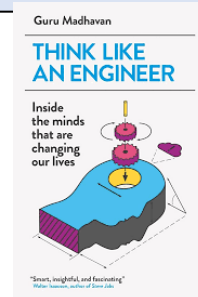
Specialist key terms for this unit:

- new and emerging technologies
- energy generation and storage
- developments in new materials
- systems approach to designing
- mechanical devices
- materials and their working properties
- forces and stresses
- ecological and social footprint
- sources and origins
- using and working with materials
- stock forms, types and sizes
- scales of production
- specialist techniques and processes
- surface treatments and finishes

Subject reading:

GCSE Revision Guide – AQA

Think like an Engineer – Guru Madhavan



Suggested enrichment activities:

It is always great if you can get some practical experience with using basic materials such as wood, metal and plastic. This will give you the knowledge of how these materials respond when working with them and the positive and negatives of using them for different products.



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Unit: 1 – Non-Examined Assessment (NEA)

You will be studying AQA, Product Design (Design & Technology) GCSE. The course comprises of 1 exam (2 hours) sat May/June and an NEA assessment:

AO1: Identify, investigate and outline design possibilities

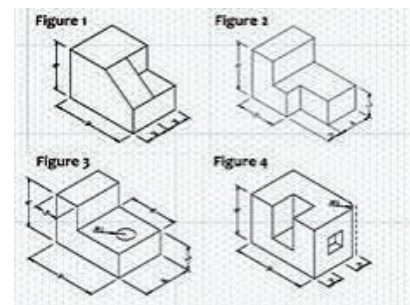
AO2: Design and make prototypes that are fit for purpose

AO3: Analyse and evaluate

For further information, past papers and examiners reports, visit: ([https://www.aqa.org.uk/subjects/design-and-technology-8552](https://www.aqa.org.uk/subjects/design-and-technology/gcse/design-and-technology-8552))

Key topics include:

- ✓ **AO1: Identify, investigate and outline design possibilities**
 - A: Identifying & investigating design possibilities (10)
 - B: Producing a design brief & specification (10)
- ✓ **AO2: Design and make prototypes that are fit for purpose**
 - C: Generating design ideas (20)
 - D: Developing design ideas (20)
 - E: Realising design ideas (20)
- ✓ **AO3: Analyse and evaluate**
 - F: Analysing & evaluating (20)



Assessment:

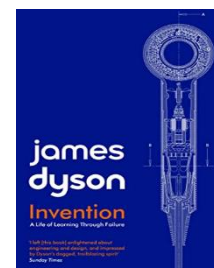
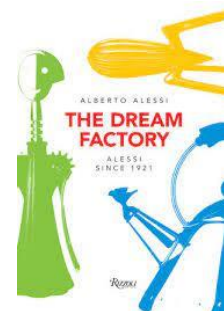
The NEA is worth 50% of the GCSE and will run from June (Y10) to February (Y11)

Specialist key terms for this unit:

- ✓ Product Analysis
- ✓ Users
- ✓ Target Audience
- ✓ Design Specification
- ✓ Design Brief
- ✓ Evaluation
- ✓ Orthographic
- ✓ Isometric
- ✓ Task Analysis
- ✓ Annotation
- ✓ Development
- ✓ Research
- ✓ Client needs
- ✓ CAD/CAM

Subject reading:

The Dream Factory – Alberto Alessi
Invention – James Dyson



Suggested enrichment activities:

Drawing, drawing and more drawing. Spend time practicing your sketching skills to help improve your communication

Look at different products and about how they work and why people buy them over other products that do the same thing!



Educas 3D Design (Art & Design)



Year 11 - Unit 1 & 2

Students will begin creation of their research based portfolio project which counts toward their final GCSE. The course consists of:

- Unit 1 60% of GCSE 120 marks (Portfolio based on two themes – Natural Systems and Unexpected)
- Unit 2 40% of GCSE 80 marks (Portfolio and a 10 hour practical exam)

Students are tasked with researching either Natural Systems and Unexpected. They must identify relevant artists and create their own response to the chosen theme and artist work. Students will practise hand drawn skills, explore different media (such as painting, digital design and photography) and give a detailed analysis of colour, shape, mood from their research explaining how such features will impact their own designs and ideas. These observations must be documented in the form of sketchbooks and digital portfolios and show a clear narrative of direction with regards to a final product.

Assessment:

Students will be marked on four areas. These are: AO1 Critical understanding AO2 Creative making AO3 Reflective recording AO4 Personal outcome.

Assessment criteria are on the shared area and exemplars are displayed on the shared area on Teams as well as in class.

Professional presentation is also assessed.

Specialist key terms/ names for this unit:

Design Features	Iteration
Evaluate	Methodology
Refine	PowerPoint
Artist Research	Presentation
ACCESS FM	Sketching
Response	Digital Art

Suggested enrichment activities:

We strongly recommend students conduct photographic research and visit stores and the Design Museum. This is essential for development of their ideas and will count towards their grade for research and recording their observations.

Additional Information can be found here: [GCSE Specification Template](#)