



## PLUME ACADEMY - LEARNING OVERVIEW

Year	11
Course	AQA Technology - Graphics
Specification Number/Exam Board	8552
End of course assessment and weightings	NEA 50% Written Exam 50%

### Prior Learning

The subject builds on your child's key stage 3 experience in 9 by extending students understanding of modelling materials and techniques through a series of short tasks. Students will develop skills in CAD/CAM and employ skills started in evaluation and analysis

### Curriculum Intent – What are the curriculum aims?

The curriculum aims in GCSE Graphics are:

- demonstrate their understanding that all design and technological activity takes place within contexts that influence the outcomes of design practice
- develop realistic design proposals as a result of the exploration of design opportunities and users' needs, wants and values
- use imagination, experimentation and combine ideas when designing
- develop the skills to critique and refine their own ideas whilst designing and making
- communicate their design ideas and decisions using different media and techniques, as appropriate for different audiences at key points in their designing
- develop decision making skills, including the planning and organisation of time and resources when managing their own project work
- develop a broad knowledge of materials, components and technologies and practical skills to develop high quality, imaginative and functional prototypes
- be ambitious and open to explore and take design risks in order to stretch the development of design proposals, avoiding clichéd or stereotypical responses
- consider the costs, commercial viability and marketing of products
- demonstrate safe working practices in design and technology
- use key design and technology terminology including those related to: designing, innovation and communication; materials and technologies; making, manufacture and production; critiquing, values and ethics.

**Curriculum Implementation – What will my child will be learning?**

Term 1	Half Term 1	<p><b>NEA</b> AO1 Section B: Producing a design brief and specification AO2 Section C: Generating design ideas develop a design brief and specification based on the analysis done during the previous half term. A range of initial designs are produced and evaluated, using a range of methods</p> <p><b>NEA</b> AO2 Section D: Development of design ideas Students produce iterative designs and undertake experiments in modelling methods and materials in order that their design choices are based on their understanding.</p>
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	Half Term 2	<p><b>NEA</b> A02 Section E: Realising design ideas Students produce designs for a final product and produce a manufacturing specification and production plan highlighting the range of materials and techniques that they will employ whilst making their prototype. Students explore the commercial production methods available to designers when developing their products for industry.</p> <p><b>Mock Exams</b> – students undertake revision of topics learnt on the course so far to be prepared for an exam that emulates their final test and the remaining 50% of marks.</p>
Term 2	Half Term 3	<p><b>NEA</b> AO3 Section F: Analysing and evaluating Students employ their modelling skills in the production of a prototype. A range of skills are to be demonstrated and students have the opportunity to use a range of materials and methods. Students then use a series of testing methods to evaluate their prototype.</p>
	Half Term 4	<p><b>Theory module</b> – student work on the knowledge of how designers are affected by: industry and enterprise, people, culture and society, production methods, design strategies, systems approach to designing, scales of production and electronics systems</p>
Term 3	Half Term 5	<p><b>Maths in D&amp;T</b> Students revise a range of maths processes which can occur on exam papers. This helps students prepare for the technology exam and their Maths papers.</p> <p><b>Revision</b> Students recap the course content through a range of activities and identify how to correctly respond to exam questions</p>
	Half Term 6	

**Curriculum Impact – How will progress be assessed as I learn?**

*Students will be assessed using the AQA NEA marking criteria.*

**NEA – Total 100 marks**

AO1 Section A: Identify and investigate design possibilities (10 marks) AO1 Section B: Producing a design brief and specification (10 marks) A02 Section C: Generating design ideas(20 marks)

AO2 Section D: Development of design ideas (20 marks) A02 Section E: Realising design ideas (20 marks)

AO3 Section F: Analysing and evaluating (20 marks)

**Exam – Total 100 marks**

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.



## Super-Curricular Opportunities – Support and Extending Learning

Useful study resources	If a student is really passionate about this subject...	As a parent/carer, I can assist my child in this subject by:
<p><a href="https://www.technologystudent.com/">https://www.technologystudent.com/</a> <a href="https://www.bbc.co.uk/bitesize/examspecs/zby2bdm">https://www.bbc.co.uk/bitesize/examspecs/zby2bdm</a> CGP GCSE AQA Design &amp; Technology (for the grade 9- 1 course) – revision guide</p>	<p>Students can use the on-line cloud-based 3D modelling software Sketchup, practice using the software and explore features using youtube tutorials.</p>	<p>Encourage students to visit Design related exhibitions or museums to expand their interest in design history and the process of design</p>