Grade 7+ In Design & Technology

Your GCSE grade is determined by 2 things:

- NEA (Design Folder and Practical Outcome) – 50%
- 2 Hour Exam – 50%

Let's consider how to maximise your marks in each of these

NEA (Non Exam Assessment – 50%) The Basics!

The structures in place to support:

- Published assessment objectives (AO)
- Short/regular internal deadlines
- Shared NEA Resources Folder – access to support materials for each suggested part of the folder
- Individual tracking sheet

How you can achieve the largest number of marks

- Read the AO and ensure there is solid evidence for each point in your folder
- Meet all internal deadlines – by completing required work during lessons
- Use the Shared Resources for completing work at home/ after school if you need some extra time
- Check your progress regularly

NEA

A little more detail!

NEA - Assessment Objectives

		9-10	
Identifying and investigating design possibilities (AO1)	Identifying opportunities	undertaken a comprehensive and effective identification of opportunities for the development of designs within the prescribed context.	11th July
	Relevant research	undertaken comprehensive, relevant research and investigation, clearly linked to the context and, where appropriate, the work of past/present professionals and companies.	
	User wants/needs and analysis	undertaken an effective analysis of information, reflecting the needs, wants and values of clients or potential users.	
	Explored possibilities to develop briefs	identified a range of problems/opportunities to clearly inform the development of possible design briefs.	

NEA - Assessment Objectives

		9-10	
Developing a design brief and specification(AO1)	Considered range of design problems	thoroughly considered a range of problems/opportunities in detail before deciding upon a final design brief.	12th September
	Understanding of the design task	demonstrated a very good understanding of the task ahead and the requirements which have to be met, to satisfy fully the needs, wants and interests of potential users.	
	Design brief	written a comprehensive design brief, directly relevant to the context, based upon a thorough analysis of their research and investigation.	
	Design specification	written a comprehensive, relevant specification, including a range of objective and measurable criteria, to direct and inform the design and manufacture of a prototype.	

NEA - Assessment Objectives

		24-30	
Generating and developing design ideas (AO2)	Use of design strategies and iterative design	considered a range of design strategies, techniques and approaches and applied an iterative design process to generate and communicate a range of initial ideas which fully reflect all requirements.	3rd October
	Social, Moral, Economic Factors	identified and considered social, moral and economic factors which are fully relevant to the context and potential user(s).	24th October
	Testing to develop designs	clear, effective and detailed use of testing to evolve ideas and to refine their design decisions.	
	Fully developed design proposal	developed a proposal, including comprehensive and relevant details of materials, dimensions, finishes and production techniques, which clearly address all requirements of the design brief and specification.	22nd November
	Communication techniques	demonstrated sophisticated use of skills/techniques to clearly communicate ideas and proposals to a third party.	

NEA - Assessment Objectives

		24-30	
Manufacturing a prototype (AO2)	Planning for manufacture	clearly communicated comprehensive and relevant details of a logical sequence and achievable timeline for the stages of production and testing of their final prototype.	13th December
	Worked with materials and components	worked with appropriate materials and components to complete all aspects of the manufacture of their prototype to a defined schedule.	13th February
	Produce a high quality prototype	used appropriate making skills and processes to produce a high quality functioning prototype that fully meets all requirements of the design specification and is fit for purpose.	
	Using tools/ techniques/ processes/ equipment	selected and safely used specialist tools, appropriate techniques, processes, equipment and machinery with excellent accuracy and precision to enable the prototype to perform as intended and fully meet the user's requirements.	

NEA - Assessment Objectives

		16-20	
Analysing and evaluating design decisions and prototypes (AO3)	Evaluation and testing of ideas	undertaken a critical, objective analysis, evaluation and testing of their ideas and decisions whilst applying iterative design processes.	13th March
	Evaluation and testing of prototype	undertaken a critical and objective evaluation and testing of their final prototype, taking into account the views of potential users.	
	Further development	responded to feedback and clearly identified the potential for further development of their prototype, with detailed suggestions for how modifications could be made.	

NEA – Final tips

- Look through past pupils' work – your teacher can direct you to students who achieved 7+ grades overall.
- There is no such thing as too much evaluation, feedback or analysis.
- You must consider the social/moral/economic impacts of your design/prototype throughout your folder – this can't be added as a final sheet.
- A well finished product is essential – keep it small.

Exam (50%)
The Basics!

The structures in place to support:

- Bi-weekly revision on SENECA
- Access to Specification (Amplification)
- Time between March final deadline and exam date (TBC) for revision of key topics in lesson

How you can achieve the largest number of marks:

Complete home work and keep working until you achieve at least 80% on the whole assignment.

Read the details and ensure your revision timetable includes time to revise the areas where you feel least confident .

Attend all lessons, up to your exam date and attend the after school sessions to troubleshoot any topics you are finding tricky.

EXAM

A little more detail!

EXAM – The Basic structure

	For Examiner's use only		
	Question	Maximum Mark	Mark Awarded
Section A	1.	10	
	2.	10	
	3.	15	
	4.	20	
	5.	20	
Section B	6.	25	
	Total	100	

Section A – A typical paper would include questions based upon (the exact order/focus changes with each paper):

Question 1: Design and technology and our world
Question 2: Smart materials, composites and technical textiles
Question 3: Electronic systems and programmable components and Mechanical components and devices
Question 4: Materials
Question 5: Materials

Section B – Questions which are more in depth, but pupils only select one material category

Question 6 – Most students choose to answer the questions related to "Natural and Manufactured Timber".

Questions range from simple multiple choice (start of paper), to longer written answers up to 5/6 marks

Answering every question, fully, gives you the best chance of being awarded marks

Science and Maths based questions cross over with foundation tier knowledge in these subjects

You should always explain your answers, if there is more than 1 mark available

If a longer answer is worth 6 marks, this would normally require 3 separate points + explanation (write 4 to be safe)

Know your "command words". Use highlighters to draw attention to them and any other key words

EXAM – Command words

To excel in the Design & Technology Exam you need to answer each question properly – this starts with understanding what you're being asked to do:

Describe

Give an account in words of a thing, event or feature

Discuss

Set out both sides of an argument (based on evidence) and come to a con-clusion

Explain/Why/ Suggest reasons for

Set out the causes and the factors which influence it

Evaluate

Consider several options and come to a conclusion

Analyse

Break down the content of the top-ic/issue into parts and provide an in depth understand-ing

GCSE Grades – it's a numbers game

Let's consider 3 different students, using grade boundaries from 2023-24.

	9	8	7	6	5	4	3	2	1
NEA	82	76	70	63	55	48	36	24	12
Exam	80	71	63	55	48	41	30	19	8
Overall	162	147	133	118	103	89	66	43	20

Student A

Achieves **55** for the NEA

To achieve a:

Grade 7 overall

78% on the Exam

Grade 8 overall

92% on the exam

Grade 9 overall

Not achievable

Student B

Achieves **70** for the NEA

To achieve a:

Grade 7 overall

63% on the Exam

Grade 8 overall

77% on the exam

Grade 9 overall

92% on the exam

Student B

Achieves **90** for the NEA

To achieve a:

Grade 7 overall

43% on the Exam

Grade 8 overall

57% on the exam

Grade 9 overall

72% on the exam

Meaning, your overall attainment will be "capped" by your performance in the NEA.

So, how can you achieve 7+ in Design & Technology?

Key Takeaways

- Achieve as many marks as possible on the NEA
- Consistent, regular, focussed revision – create a timetable now and use it
- Know which areas your knowledge is least secure – revise these the most (your teacher will provide you with detailed information after the mock exams)
- Attend EVERY LESSON, until you have completed your exam
- Use EVERY SECOND in the exam. Read and re-read every question and answer until the time is up.