Subject	Y12 Core Knowledge – Autumn/Spring/Summer term	How to support students' learning
Tech – Product	Autumn Term 1. Recognise a range of materials and their properties. 2. Understand materials are tested. 3. Follow simple instructions to build a functional product. 4. Explore a range of materials to explore their working properties. 5. Identify a range of stock forms and where they would be used. 6. Demonstrate a range of design communication techniques. 7. Understand the socio-economic factors affecting design movements. 8. Recognise a variety of designers both past and present and their key aesthetic. 9. Analyse how technology has impacted design outcomes. Spring/Summer Term 10. Understand how we can enhance materials to improve their performance qualities. 11. Identify a range of forming, addition and wastage processes. 12. Evaluate a range of finishes and where these applications would be suitably used. 13. Create a detailed design specification for a product. 14. Think iteratively to develop a range of design ideas that fulfil a task. 15. Model a prototype design using a range of methods. 16. Critically evaluate your own design model. 17. Select the correct tools and equipment to produce a functioning prototype. 18. Analyse existing products to understand design decisions. 19. Understand design for manufacture including health and safety.	 https://studyrocket.co.uk/re vision/a-level-design-and-technology-aqa/technical-principles/materials-and-their-applications https://youtu.be/czqc_32i-PM https://www.thespruce.com/types-of-wood-joints-6822939 https://www.ilsley.bham.sc h.uk/wp-content/uploads/2024/10/Design-Technology-Knowledge-Organiser-Paper-1.pdf https://www.bbc.co.uk/bitesize/guides/zkvny4j/revision/6 https://www.youtube.com/watch?v=bjEw-mulcjA https://www.hartismere.com/view/1489PC4ZF10.pdf/Design Movements Timeline https://www.hartismere.com/view/1489PC4ZF10.pdf/Design Movements Timeline https://thedesignhive.co.uk/how-technology-is-changing-the-world-of-design/ https://youtu.be/aKVzJEGzYcw https://quizlet.com/gb/799893774/aqa-a-level-design-technology-paper-1-unit-4-classification-of-materials-revision-book-flash-cards/https://youtu.be/h7E8LOICjag8 Writing Design Specifications: Quick Guide — RewiSoft

	 Iterative design - Designing - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize DTBASE Design and Technology Revision - Home page. A student guide to the A Level independent investigation (Nonexamined Assessment - NEA) - RGS. Design & Technology: Tools and equipment https://www.bbc.co.uk/bitesize/articles/ztmcqyc https://youtu.be/QnP7p9iis Ms
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