



DT knowledge revision tracker below:-

Name _____ Class _____ DT GCSE Knowledge Tracker		Covered	Confident	semi-confident	NOT Confident
<b>Core Technical Principles (CTP)3.1.1</b> New and emerging technologies	Industry				
	Enterprise				
	Sustainability				
	People				
	Culture				
	Society				
	Environment				
	Production Techniques and systems Critical evaluation of new and emerging technologies				
<b>CTP 3.1.2</b> Energy generation and storage	Fossil Fuels				
	Nuclear Power				
	Renewable Energy				
	Energy storage system including batteries				
<b>CTP 3.1.3</b> Developments in New Materials	Modern materials				
	Smart Materials				
	Composite Materials				
	Technical Textiles				
<b>CTP 3.1.4</b> Systems Approach to Designing	Inputs				
	Processes				
	Outputs				
<b>CTP 3.1.5</b> Mechanical Devices	Different Types of Movement Changing Magnitude and Directions of Force <b>(Levers, Linkages and Rotary Systems)</b>				
<b>CTP 3.1.6</b> Material Categories	Papers and Boards				
	TIMBERS: Natural and manufactured				
	Metals and Alloys				
	Polymers				
<b>Specialist Technical</b>	Textiles				
	3.2.1 Selection of Materials or Components				
	3.2.2 Forces and Stresses				
	3.2.3 Ecological and social Footprint				
	3.2.4 Sources and Origins				



<b>Principles (STP)</b>	3.2.5 Using and working with materials				
	3.2.6 Stock forms, types and sizes				
	3.2.7 Scales of production				
	3.2.8 Specialist techniques and processes				
	3.2.9 Surface treatments and finishes				
<b>Designing and Making Principles (DMP)</b>	3.3.1 Investigation, primary and secondary data				
	3.3.2 Environmental, social and economic challenge				
	3.3.3 The work of others				
	3.3.4 Design Strategies				
	3.3.5 Communication of design ideas				
	3.3.6 Prototype development				
	3.3.7 Selection of materials and components				
	3.3.8 Tolerances				
	3.3.9 Material management				
	3.3.10 Specialist tools and Equipment				
	3.3.11 Specialist techniques and processes				



## COMPUTING

The 4<sup>th</sup> year end of unit exam will cover the following areas:

- Programming Basics (Data types and Operations, Sequence and Selection, Iteration, Arrays, Records and Files)
- Data Representation (Storage units and Binary Numbers, Binary Arithmetic and Hexadecimal, ASCII and Unicode, Images, Sound, Compression)
- Fundamentals of Algorithms (Developing Algorithms using Flowcharts, Developing Algorithms using Pseudocode)
- Computer Systems (Boolean Logic, Application and System Software, Systems Architecture, CPU and F-E Cycle, Memory, Secondary Storage)
- Impacts of Digital Technology (Ethical Issues, Digital Technology in Society, Legislation and Privacy)
- Fundamentals of Computer Networks (Wired and Wireless Networks, Network Topologies and Transmission, Network Security)

There is an AQA revision book out now which the boys can buy. I have ordered some and the boys can buy them from me. They haven't been delivered yet but boys can either wait to buy them from me or buy them online.

- <https://www.amazon.co.uk/GCSE-Computer-Science-Revision-Guide/dp/1782949313/>

There is also an exam practise workbook which can be bought from:

- <https://www.amazon.co.uk/GCSE-Computer-Science-Practice-Workbook/dp/1782949321/>

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Other websites for revision are as follows:

- [http://www.teach-ict.com/2016/GCSE\\_Computing/AQA\\_8520/aqa\\_8520\\_home.html](http://www.teach-ict.com/2016/GCSE_Computing/AQA_8520/aqa_8520_home.html)
- [https://bournetocode.com/projects/GCSE\\_Computing\\_Fundamentals/index.html](https://bournetocode.com/projects/GCSE_Computing_Fundamentals/index.html)
- [https://www.youtube.com/playlist?list=PL04uZ7242\\_M6yJQRfFcPUhAxykFNUuPQy6](https://www.youtube.com/playlist?list=PL04uZ7242_M6yJQRfFcPUhAxykFNUuPQy6)
- <https://www.memrise.com/course/626588/aqa-computer-science-gcse/>
- <https://www.bbc.com/education/subjects/z34k7ty>