

Year 10 Computer Science Revision Timetable

Mock Exams

We will be asking you to revise different topics each week using weekly revision activities via a Showbie class to be completed as homework and during revision lessons. (Ask your teacher for the class code)

Exams

You will have two mock exams.

1 hour 30 min Paper 1 Principles of Computer Science (Written exam)

1 hour Paper 2 Application of Computational Thinking (onscreen assessment)

Revision Techniques:

- Quizlet <https://quizlet.com/join/NjTer8TpC>
- Use CSUK Revise <https://revisecs.csuk.io/>
- Videos on YouTube – Search GCSE Edexcel Computer Science and “Craig n Dave”. Videos on all the topics.
- BBC Bitesize – Make sure you search Computer Science and enter the Exam Board as Edexcel
- Seneca Learning – Log in and review all the Information about the Topic, take the tests and check on the assignments.
- Practice coding on Trinket (Class code: <https://trinket.io/courses/join/WdNAam>)

GCSE Edexcel Computer Science Revision Schedule

Date	Topic	Revised & Tested?
Week 1 19 th Feb	Topic 3: Computers <input type="checkbox"/> Stored program concept <input type="checkbox"/> Fetch-decode-execute cycle <input type="checkbox"/> Main memory (RAM) <input type="checkbox"/> CPU (control unit, arithmetic logic unit, registers) <input type="checkbox"/> Clock speed <input type="checkbox"/> Pipelining <input type="checkbox"/> Buses - address bus, data bus, control bus	
Week 2 26 th Feb	Topic 3: Computers Secondary storage and the ways in which data is stored on devices: <input type="checkbox"/> magnetic <input type="checkbox"/> optical <input type="checkbox"/> solid state Embedded system and what embedded systems are used for	
Week 3 4 th March	Topic 1 Computational Thinking <input type="checkbox"/> Programming constructs <input type="checkbox"/> Variables, constants, global and local and data types <input type="checkbox"/> Benefits of using subprograms	
Week 4 11 th March	Topic 2 Data <input type="checkbox"/> Unsigned integers <input type="checkbox"/> Two's complement signed integers	

	<input type="checkbox"/> Convert between denary and 8-bit binary numbers (0 to 255, -128 to +127) <input type="checkbox"/> Binary addition <input type="checkbox"/> Logical binary shift <input type="checkbox"/> Arithmetic binary shifts <input type="checkbox"/> Overflow <input type="checkbox"/> Hexadecimal and binary conversions	
Week 5 18 th March	Topic 2 Data <input type="checkbox"/> Computers encode characters using 7-bit ASCII <input type="checkbox"/> Bitmap images are represented in binary (pixels, resolution, colour depth) <input type="checkbox"/> Analogue sound is represented in binary (amplitude, sample rate, bit depth, sample interval) <input type="checkbox"/> Limitations of binary representation of data when constrained by the number of available bits Data storage <input type="checkbox"/> Data storage is measured in binary multiples <ul style="list-style-type: none"> - bit - nibble - byte - kibibyte - mebibyte - gibibyte - tebibyte <input type="checkbox"/> construct expressions to calculate file sizes and data capacity requirements Compression Data compression and methods of compressing data <input type="checkbox"/> Lossless <input type="checkbox"/> lossy	
Week 6 25 th March Easter Hols	Topic 1 Computational thinking <input type="checkbox"/> Benefit of using decomposition and abstraction to model aspects of the real world and analyse, understand and solve problems <input type="checkbox"/> Flow charts	
Week 7 1 st April Easter Hols	Programming exam practice on Trinket Revisit weekly revision tasks	
Week 8 8 th April	Mock Exam Paper 1	
Week 9 15 th April	Mock Exam Paper 2	