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# COMPUTING

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**Year 11**

**Topics studied:**

In the autumn and spring terms, students will revisit previous topics, including communication and the ethical, legal and environmental impacts of ICT. In the summer term, students will revise for their Unit 2 on-screen examination.

**Examination Board:**

WJEC

Year 11 students follow the legacy WJEC GCSE in Computer Science specification. This course uses the A\* to G grading structure.

**Assessment Structure:**

Unit 1 – Understanding Computer Science (45%) 1 hr 30 mins examination  
Unit 2 – Solving Problems Using Computers (30%) 2 hr on-screen examination  
Unit 3 – Developing Computing Solutions (25%) controlled assessment

**Keywords that students should know, and be able to spell, by the end of Year 11:**

Algorithms, Array, ASCII, UNICODE, Binary, Bits, Boolean, Bytes, Cache memory  
Cache size, Capacity, Character, Clock speed, Colour depth, Compression, CPU, DBMS,  
Denary, Durability, Environmental, Ethical, Flash memory, Hexadecimal, IP addressing,  
Iteration, Logic, Logic diagrams, Lossy and lossless compression, Memory, Multi-tasking,  
Networks, NOT, AND and OR, Data Packet, Peripheral, Pixels, Portability, Protocols,  
Queries, RAM, ROM, Relational databases, Reliability, Reports, Resolution, Sampling,  
Secondary storage, Security, Selection, Sequence  
Speed, Topology, Truth table, Validation, Verification, Virtual memory

**Subject specific websites to support revision and independent learning:**

<http://www.teach-ict.com/>

<http://www.bbc.co.uk/education/subjects/z34k7ty>

[www.advanced-ict.info/programming/tasks.html](http://www.advanced-ict.info/programming/tasks.html) (Learn to code)

[www.codecademy.com/](http://www.codecademy.com/) (Learn to code)

<http://www.greenfoot.org/door> (Greenfoot Java Programming)

**Recommended subject guides:**

- TBC

**To help your child in GCSE Computing this year you can:**

- ensure they have space and quiet to revise key knowledge, complete homework and prepare for their final examinations



- support them in learning how to spell the keywords above
- ask them to explain the keywords above by reflecting on their lessons
- encourage them to access the above subject specific websites and to undertake further reading on the topics covered and complete the tests/quizzes
- encourage them to produce cue cards on each topic area and use them to revise and test their key knowledge
- help them to practise past examination papers, in timed conditions, found on the WJEC website
- encourage them to attend extra provision sessions held at lunchtime to work on their controlled assessment

**Additional Information:**

Students will be set homework tasks each half-term and will complete a milestone assessment after each topic area.

