

Computer Science GCSE



Exam Board: **EDEXCEL**

2 papers 50% each

1: Principles of Computer Science

2: Application of Computational Thinking (scenario based)

https://qualifications.pearson.com/en/support/support-topics/exams/past-papers.html

Topics students are examined on:

• Topic 1: Problem solving

Students are expected to develop a set of computational thinking skills that enable them to understand how computer systems work, and to design, implement and analyse algorithms for solving problems

• Topic 2: Programming

Students should be competent at designing, reading, writing and debugging programs

• Topic 3: Data

Students are expected to know how different types of data are represented in a computer

• Topic 4: Computers

Students must be familiar with the hardware and software components that make up a computer system and recognise that computers take many forms from embedded microprocessors to distributed clouds

- Topic 5: Communication and the internet
 Students should understand the key principles behind the organisation of computer networks
- Topic 6: The bigger picture
 Students should be aware of the influence of computing technology and recognise that computing has an impact on nearly every aspect of the world in which they live

Programming Project

The GCSE in Computer Science requires each student to undertake a programming project, where they will develop a computer program. The project is not assessed and does not contribute towards the final grade but needs to be completed in class under controlled conditions

Useful websites for revision:

- www.bbc.com/bitesize/subjects/z34k7ty
- A range of videos can be viewed at:
 https://student.craigndave.org/gcse-videos
 These are aimed at the OCR syllabus but are still very relevant and cover the majority of the topics studies for the Edexcel course

All students have a copy of: Revise Edexcel GCSE (9-1) **Computer Science Revision Guide**

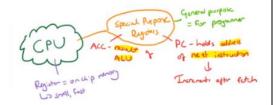
REVISE EDEXCEL GCSE (9-1)
Computer
Science
REVISION
GUIDE

All students have access to their OneNote exercise book and revision resources – this is

accessed by logging into obhs.sharepoint.com

Suggested revision activities to help your child prepare for the Computer Science exam:

- Encourage your son/daughter to create flash cards, trying to overlap resources from the revision guides, online videos and their OneNote class pages
- Encourage them to write their own revision notes. They should aim to rewrite text and notes, then try to process and understand them



- Practise past papers and work through the knowledge organiser tasks in their OneNote exercise book
- Encourage them to revisit their **DIRT** analysis pages in their OneNote exercise book. These will highlight the areas of weaknesses from previous tests/mock exams. Your son/daughter should aim to revise the topics they found difficult and not just to re-revise the content they are more comfortable with
- Practise coding and more coding. All students have access to a range of coding websites, including https://snakify.org/en/ - this will help with the content of Paper 2
- Create a glossary of terms encourage your son/daughter to revisit their OneNote exercise book and to collate
 the key terms gathered in Year 10 and 11 this will provide a valuable revision resource which can be shared
 and tested regularly at home
- Encourage your son/daughter to take regular breaks from their revision some useful strategies can be found at www.cambridgeacademicperformance.co.uk/2015/04/02/how-to-use-revision-breaks-effectively/ and www.oxfordhomeschooling.co.uk/revision-techniques/when-should-i-take-breaks/