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| **GCSE Computer Science** Revision List Summer 2025 | |
| Exam information  **Exam Board:** OCR (J277)  **Paper Information:** 1 paper focusing on computational thinking, algorithms and programming  (Component 2)  You should aim to write algorithm/pseudocode/exam reference language questions in a Python format as this is the programming language you have used at GCSE. You need to include a comment on your algorithm questions (1 easy mark). A large amount of the paper is made up of definitions of key terms, advantages and disadvantages. Knowledge based questions (1-3 mark questions).  **Paper marks:** 50 marks  **Duration:** 1 hour | |
| Topic | Revised? |
| Abstraction and decomposition |  |
| Reading, writing and interpreting algorithms |  |
| Programming constructs (sequence, selection and iteration) |  |
| Variables |  |
| Arithmetic operators |  |
| Data types |  |
| Arrays (1D and 2D) |  |
| Trace tables |  |
| Testing and defensive design |  |
| Searching algorithms (linear search and binary search) |  |
| Sorting algorithms (bubble sort, insertion sort and merge sort) |  |
| Writing functions and procedures |  |
| High level and low level languages |  |
| Translators (interpreters, compilers and assemblers) |  |
| Revision Links | |
| * [GCSE Computer Science area on the Computer Science & IT SharePoint](https://omegamat.sharepoint.com/sites/GSHSComputing/SitePages/KS4-Computer-Science-and-IT.aspx) * [Craig and Dave YouTube Channel](https://www.youtube.com/c/craigndave/playlists?view=50&sort=dd&shelf_id=2) * [Teach ICT J277](https://teach-ict.com/2016/GCSE_Computing/OCR_J277/OCR_J277_home.html) * GCSE Computer Science Complete Revision & Practice * Microsoft Teams / OneNote classbook * [Knowledge Organisers for all GCSE topics](https://omegamat.sharepoint.com/sites/GSHSComputing/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2Fsites%2FGSHSComputing%2FShared%20Documents%2FGCSE%20Computer%20Science%2FKnowledge%20Organisers&FolderCTID=0x0120002CFACB1AA6133C4B90B1C7B3426ACC5B) * [Practice Papers](https://omegamat.sharepoint.com/:f:/s/GSHSComputing/EjlvfJHNBIZBlCKZp_lnbLUByPKFjADjrhxJCFIfWpU2cg?e=7OGZGF) * [GCSE Exam Revision folder on SharePoint](https://omegamat.sharepoint.com/:f:/s/GSHSComputing/Et-7snyAT8dFhY-NyMCCi3cBBeAijnrycimTRTn3qWzu1A?e=nuJFKF) * Seneca Learning * Educake | |