



JOHN F KENNEDY
CATHOLIC SCHOOL

INSPIRE • ACHIEVE • SERVE

Year 11 Raising Achievement

(Computer Science)

Exam Overview



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Pearson | Edexcel

Paper 1: Principles of Computer Science

Written examination:

1 hour and 30 minutes

50% of the qualification 75 marks

Paper 2: Application of Computational Thinking

On screen examination:

2 hours

50% of the qualification 75 marks

About Paper 1



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Topic 1: Computational thinking

- understanding of what algorithms are, what they are used for and how they work; ability to follow, amend and write algorithms; ability to construct truth tables.

Topic 2: Data

- understanding of binary, data representation, data storage and compression.

Topic 3: Computers

- understanding of hardware and software components of computer systems and characteristics of programming languages.

Topic 4: Networks

- understanding of computer networks and network security.

Topic 5: Issues and impact

- awareness of emerging trends in computing technologies, and the impact of computing on individuals, society and the environment, including ethical, legal and ownership issues.

About Paper 2



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This practical paper requires students to design, write, test and refine programs in order to solve problems.

Students will complete this assessment onscreen

They will be provided with:

- coding files
- a hard copy of the question paper
- the Programming Language Subset (PLS)





Students should then answer the questions onscreen using Python 3. This assessment consists of six compulsory questions.

School Resources 1



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... > 06 Revision Resources > Topic PowerPoints ▾

Name	Last modified ▾ ↓	File size
 01.Computational_Thinking.pptx	20:04 me	4.2 MB
 02.Data.pptx	20:04 me	10.3 MB
 04 Networks .pptx	20:03 me	16.5 MB
 03.The_Computer.pptx	20:03 me	12.8 MB

Google Classroom

- Slides for each topic are available on Google Classroom.

School Resources 2



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Two a day: Day 70

Form description

This form is automatically collecting emails from all respondents. [Change settings](#)

How can you protect intellectual property rights? [tick all correct answers] *

- Get a patent
- Trade mark your brand
- Limit access to files
- License your product

How can you reduce the environmental impact of computers? [Tik all correct answers]

- Use power saving options like less bright screen
- Replace devices less frequently
- Replace items less often
- Recycle properly

Two a Day

- Every day two questions (often multiple choice) are released to students via google classroom.
- These have feedback provided.
- Last year students who did the two a day regularly outperformed other students significantly.

Class Code zcfrjmn

School Resources 3



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Topic 1: Computational Thinking

1.1.1	Define decomposition	
	Define abstraction	
	Explain the benefit of decomposition	
	Explain the benefit of abstraction	
	Apply abstraction to a real world situation	
	Define what a subprogram is	
	Explain the benefit of subprograms	
1.2.1	Identify a sequence of instruction is	
	Identify a selection instruction	

Checklist

A checklist is available which breaks down the specification making it easy to identify where you have gaps in your knowledge

This is online and printed version can be collected from C13

Free Websites: Paper 1

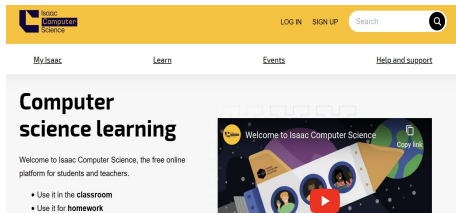


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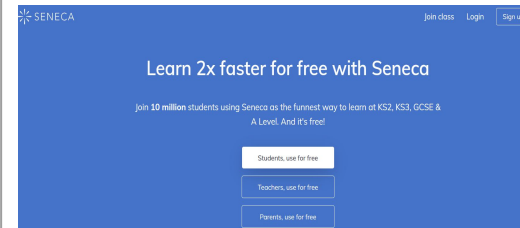
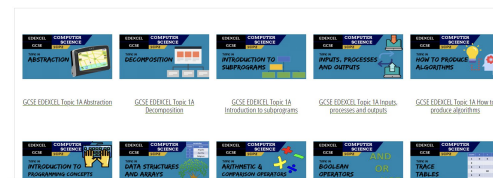
isaacomputerscience.org

Craigmave.org

senecalearning.com



Topic 1A – Computational thinking and algorithms



This has all the knowledge you need

This website has a section of videos covering every point of the course.

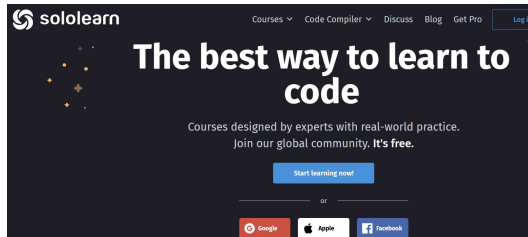
Great for regular refreshes of the theory

Free Websites: Paper 2



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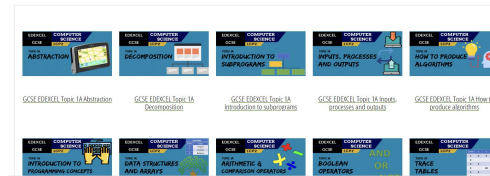
sololearn.com



Good for basic programming syntax. Good for students struggling with the programming element of the course

www.codechef.com

Topic 1A – Computational thinking and algorithms



This has lots of programming challenges. Great for perfecting students skills for the more complex Paper 2 questions.

Buying Help



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SMART REVISION

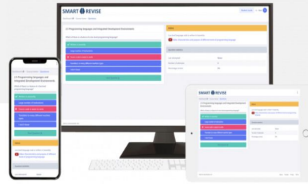
What's new

Pricing

Login

Raise attainment

Reduce workload



The online course companion for GCSE/A Level Computer Science and GCSE Business. Proven to raise attainment by redefining revision as continual practice throughout a course.

Hundreds of original multiple-choice and longer answer examination questions hand crafted by our experienced teachers and examiners. Personalised, diagnostic, spaced, interleaved and exactly matched to the requirements of each course specification.



Best Secondary
Digital Learning
Product



Curriculum
Improvement



Secondary Resource
or Equipment - ICT

[Smartrevise.craigndave.org](https://www.smartrevise.org)
£5.20 for 3 months. £7.80 for 12 months.

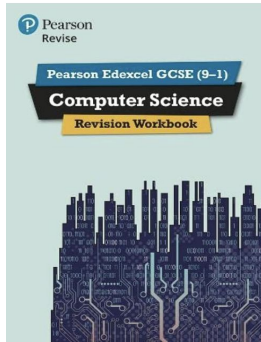
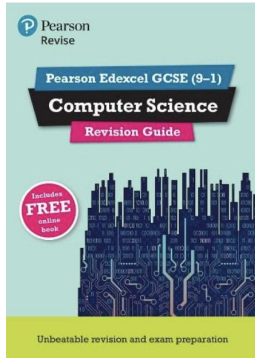
Smart Revision is a website with lots of questions and worked answers. It uses AI to analysis the students answers and ask questions to help fill identified gaps in their knowledge.

It is highly recommended by students and teachers.

Buying Help



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Pearson REVISE Edexcel GCSE (9-1) Computer Science Revision Workbook & Guide

£8.99 for both from Amazon

The guide has detailed information on each topic and the workbook has questions to help reinforce the learning,

Written by the exam board.

Revision Tips



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“The only place where success comes before work is **in the dictionary.**”

— *Vidal Sassoon, hairstylist and philanthropist*

Revision Tips



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Revision has to be active, just reading slides will not make you remember the facts.

- Create Flip Cards - Great to learn the key term
- Summarize - Help secure learning
- Mind Maps - Help link topics

Revision Tips



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Programming is a mastery. The more you do the better you will become.

- Ensure you do the lesson exam practice questions
- Practice at home and experiment. Cyber Chef is good and they are a set of do at home programming challengers you can do.

Finally



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Please feel free to email any questions or concerns