



Parental information evening

Information Technology



Cambridge National in

IT

What are Cambridge Nationals?

Cambridge Nationals are exciting, practical vocational qualifications that can help build your future.

They are Level 1/Level 2 qualifications designed for students aged 14-16 years and complement your GCSE choices.

Cambridge Nationals will inspire and help you develop real-world skills through practical learning and help you get ready for your next steps whether that's A Levels, apprenticeships or a Level 3 vocational qualification such as a Cambridge Technical.



Building *brighter* futures



How do Cambridge Nationals grades compare to GCSE (9–1)?

Grades for Cambridge Nationals and for GCSEs align at key points.

Level 1 covers GCSE grades 3–1 (or D–G) and Level 2 GCSE grades 9–4 (or A*–C).

- The bottom of a Level 1 Pass is aligned to GCSE grade 1
- The bottom of a Level 2 Pass is aligned to GCSE grade 4
- The bottom of a Level 2 Distinction is aligned to GCSE grade 7

	Cambridge Nationals	GCSE (9-1)	GCSE (A*–G)
Level 2	Distinction*	9	A*
	Distinction	8	A
	Merit	7	B
	Pass	6	C
Level 1	Distinction	5	D
	Merit	4	E
	Pass	3	F
		2	G

IT



Units and guided learning hours

Here is a reminder of the 3 units in the redeveloped Cambridge National in IT Level 1/2 J836:

Unit	Unit title	Guided learning hours (GLH)	How are they assessed?	Mandatory or optional?
R050	IT in the digital world	48	OCR set and marked	Mandatory
R060	Data manipulation using spreadsheets	36	Centre-assessed tasks, OCR moderated	Mandatory
R070	Using Augmented Reality to present information	36	Centre-assessed tasks, OCR moderated	Mandatory

Examined assessment (40% of the course)

R050 IT in the digital world

In this unit students will learn the theoretical knowledge and understanding to apply design tools for applications, principles of human computer interfaces and the use of data and testing in different contexts when creating IT solutions or products.

Topics include:

- Design Tools
- Human Computer Interface (HCI) in everyday life
- Data and testing
- Cyber-security and legislation
- Digital Communications
- Internet of Everything (IoE).

This question paper has two parts:

- Part A – worth 15 marks. Includes closed response, multiple choice and short response questions
- Part B – worth 55 marks. Includes scenario based short, medium and extended response questions. One question will be a create style question [8 marks]. One extended response question [9 marks] will be assessed using a levels of response mark scheme.

Examination: 1 hour 30 minutes.

48 GLH

70 Marks

Non-examined assessment (60% of the course)

R060 Data manipulation using spreadsheets

This OCR-set assignment contains three to five practical tasks.

Topics include:

- Planning and designing the spreadsheet solution
- Creating the spreadsheet solution
- Testing the spreadsheet solution
- Evaluating the spreadsheet solution.

Centre-assessed and OCR moderated.

36 GLH

60 Marks

R070 Using Augmented Reality to present information

This OCR-set assignment contains three to five practical tasks.

Topics include:

- Augmented Reality (AR)
- Designing an Augmented Reality (AR) model prototype
- Creating an Augmented Reality (AR) model prototype
- Testing and reviewing.

Centre-assessed and OCR moderated.

36 GLH

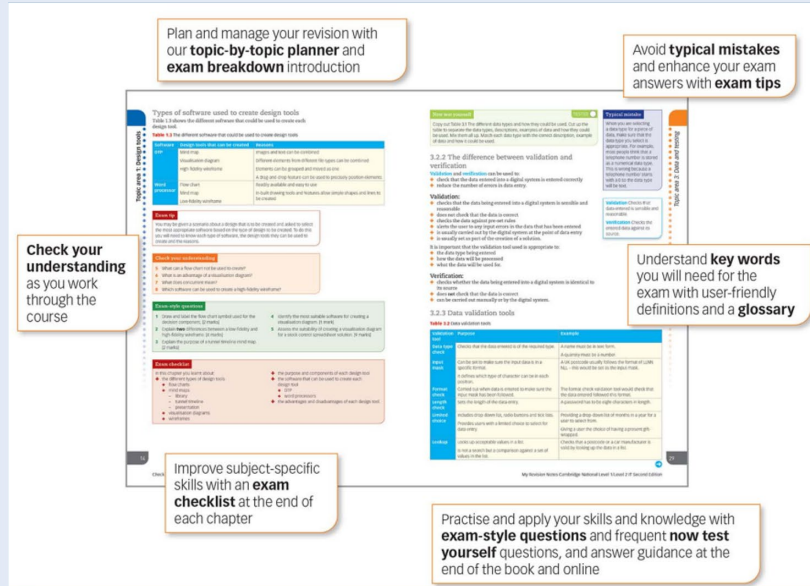
60 Marks

How to revise at DLS Information Technology



How to use the resources and websites

1. Purchase the 'Cambridge Nationals Level/Level 2 My revision Notes' guide which is available to purchase on parent mail.



Recommended websites/resources

- **Revision booklets** and other **revision resources** have been added to the pupils Teams page.
- <https://www.bbc.com/bitesize>
- <https://erevision.uk/auth>
- Search for **J836 IT** topic quizziz: <https://quizizz.com/>

Suggested Active Revision Techniques

2. **E.Revision resource** – The department have recently purchased a license to a an online platform called E.Revision. Pupils will be added to a class within the platform. Pupils will be given access to **presentations, worksheets, flash cards and knowledge tests**.
3. A range of revision techniques should be used including **flash cards, revision mats, one pagers, knowledge organisers, revision clocks, drawing diagrams with simple labels**. Do what works best for you.
4. Attend **intervention sessions** on a Wednesday lunch in F9.



Open office app launcher

Activity

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2024-10p-It1

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	Name	Modified	Modified By
	Class Materials		S Farrelly
	Command words		S Farrelly
	Knowledge organisers		S Farrelly
	Past paper		S Farrelly

The department are currently working on updating Teams with revision material.



Parental information evening

Computer Science



Content Overview

J277/01: Computer systems

This component will assess:

- 1.1 Systems architecture
- 1.2 Memory and storage
- 1.3 Computer networks, connections and protocols
- 1.4 Network security
- 1.5 Systems software
- 1.6 Ethical, legal, cultural and environmental impacts of digital technology

J277/02: Computational thinking, algorithms and programming

This component will assess:

- 2.1 Algorithms
- 2.2 Programming fundamentals
- 2.3 Producing robust programs
- 2.4 Boolean logic
- 2.5 Programming languages and Integrated Development Environments

Assessment Overview

Written paper: 1 hour and 30 minutes
50% of total GCSE
80 marks

This is a non-calculator paper.

All questions are mandatory.

This paper consists of multiple choice questions, short response questions and extended response questions.

Written paper: 1 hour and 30 minutes
50% of total GCSE
80 marks

This is a non-calculator paper.

This paper has two sections: Section A and Section B. Students must answer both sections.

All questions are mandatory.

In Section B, questions assessing students' ability to write or refine algorithms must be answered using **either** the OCR Exam Reference Language **or** the high-level programming language they are familiar with.

How to use the resources and websites

1. Use **the knowledge organisers** (see attached) to build your knowledge of keywords, topic vocabulary and how to answer exam questions. Do this regularly, little and often will build your long-term memory.
2. Use **SMART revise** to practise recall. **Advance** section allows pupils targeted grade 6 and above to look at the advanced exam style questions. **Quiz section** allows pupils to test their understanding of the whole qualification or unit by unit. **Terms** section allows you to use the pre made flash cards to help understand keywords.
3. Purchase the '**Clear Revise OCR GCSE Computer Science J277**' guide which is available to purchase on parent mail.
4. A range of revision techniques should be used including **flash cards, revision mats, one pagers, knowledge organisers, revision clocks, drawing diagrams with simple labels**. Do what works best for you.
5. Attend **intervention sessions** on a Wednesday lunch in F9.



How to revise at DLS Computer Science



Recommended websites/resources

GCSE Computer Science Knowledge Organiser (see attached)

<https://smartrevise.craigndave.org/smart-terms-2>

<https://www.bbc.com/bitesize>



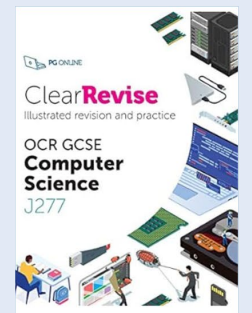
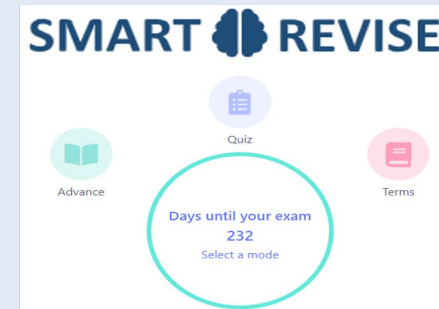
MrBrownCS you tube clips:

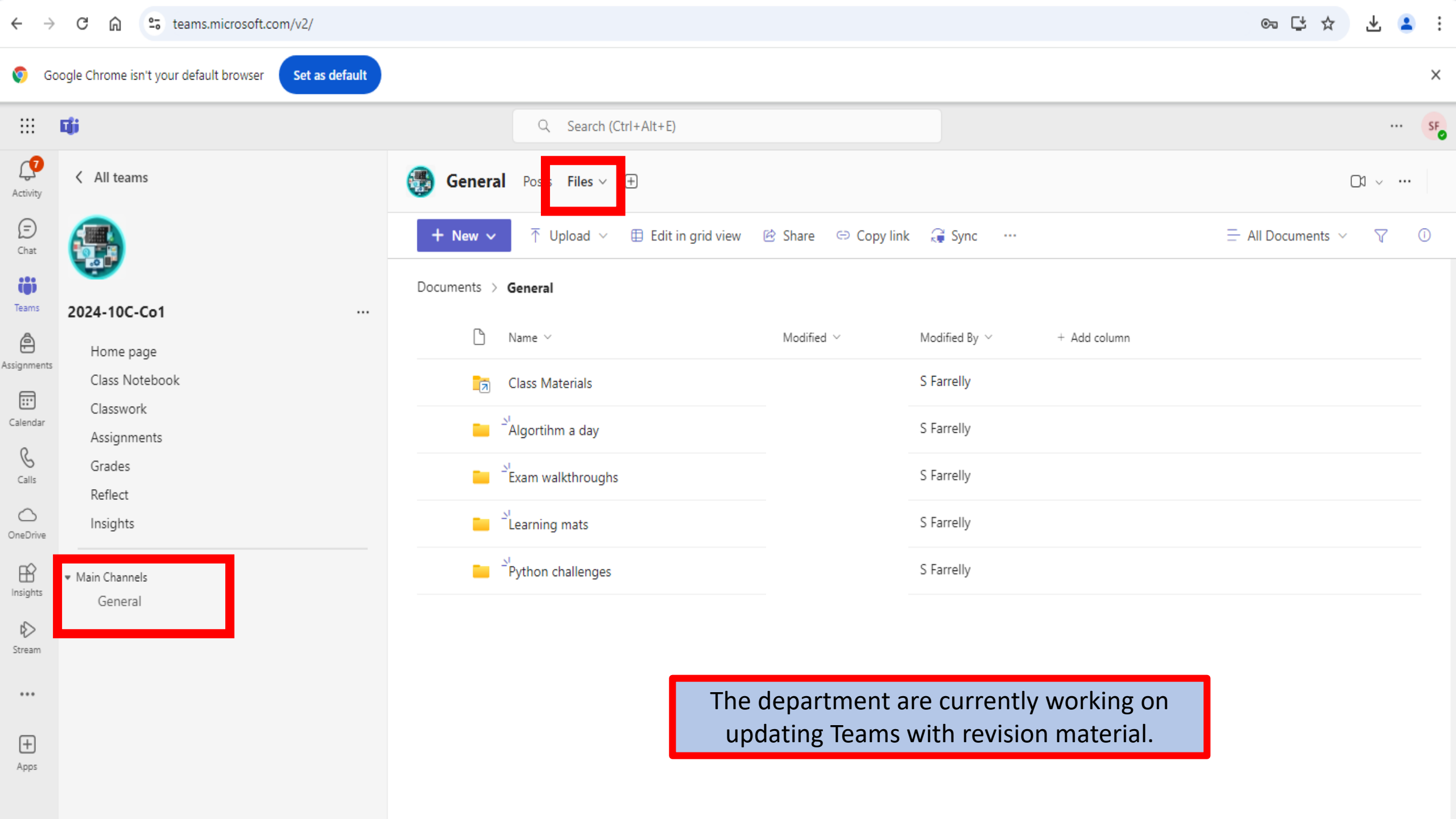
https://www.youtube.com/watch?v=sKIRIIg1Db4&list=PL04uZ7242_M5KDdD9XnuWb2MNYsM57HpU

Craig & Dave you tube clips:

https://www.youtube.com/@craigndave/playlists?view=50&sort=dd&shelf_id=2

Suggested Active Revision Techniques





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Search (Ctrl+Alt+E)

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 - Classwork
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 - Grades
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- Main Channels
 - General

General Files

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Documents > General

Name	Modified	Modified By	+ Add column
Class Materials		S Farrelly	
Algortihm a day		S Farrelly	
Exam walkthroughs		S Farrelly	
Learning mats		S Farrelly	
Python challenges		S Farrelly	

The department are currently working on updating Teams with revision material.



Craig n Dave videos

OCR GCSE (J277) Videos

Home > OCR GCSE (J277) Videos



1.1 – Systems architecture



1.2 – Memory and storage



1.3 – Computer networks, connections and protocols



1.4 – Network security



1.5 – Systems software



1.6 – Ethical, legal, cultural and environmental concerns



2.1 – Algorithms



2.2 – Programming fundamentals



2.3 – Producing robust programs

