











Helping Students in GCSE Computer Science from Home






COMPUTING & IT

UNITS - GCSE COMPUTER SCIENCE

PAPER 1: COMPUTER SYSTEMS

1.1 – Systems architecture		1.1.1 Architecture of the CPU
		1.1.2 CPU performance
		1.1.3 Embedded systems
1.2 – Memory and storage		1.2.1 Primary storage
		1.2.2 Secondary storage
		1.2.3 Units
		1.2.4 Data storage
		1.2.5 Compression
1.3 – Networks, connections & protocols		1.3.1 Networks and topologies
		1.3.2 Wired and wireless networks, protocols & layers

1.4 – Network security		1.4.1 Threats to computer systems & networks
		1.4.2 Identifying & preventing vulnerabilities
1.5 – Systems software		1.5.1 Operating systems
		1.5.2 Utility software
1.6 – Impacts of digital technology		1.6.1 Ethical, legal, cultural & environmental impact

Exam: 1 hour , 30 minutes | 50% of the grade

2.1 – Algorithms		2.1.1 Computational thinking
		2.1.2 Designing, creating & refining
		2.1.3 Searching and sorting
2.2 – Programming fundamentals		2.2.1 Programming fundamentals
		2.2.2 Data types
		2.2.3 Additional programming techniques
2.3 – producing robust programs		2.3.1 Defensive design
		2.3.2 Testing
2.4 – Boolean logic		2.4 Boolean logic
2.5 – Languages & IDEs		2.5.1 Languages
		2.5.2 The Integrated Development Environment (IDE)

Exam: 1 hour , 30 minutes | 50% of the grade

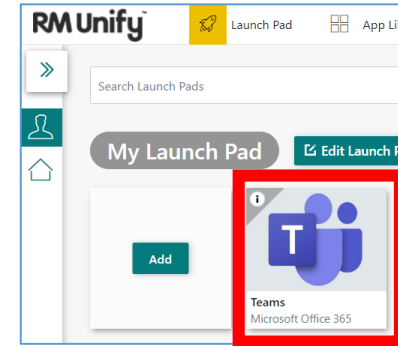
PAPER 2: ALGORITHMS & PROGRAMMING

Where Students can find resources from home

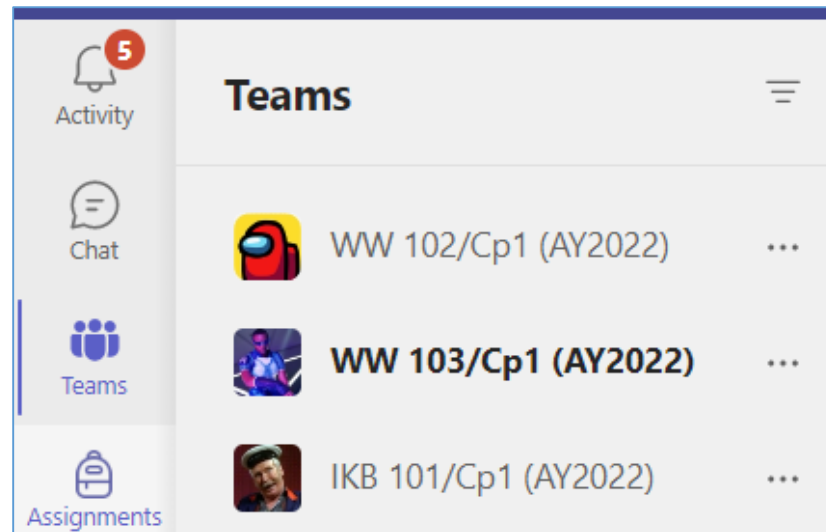
1. From <https://www.wellswayschool.com/>
Go to **RMUnify**



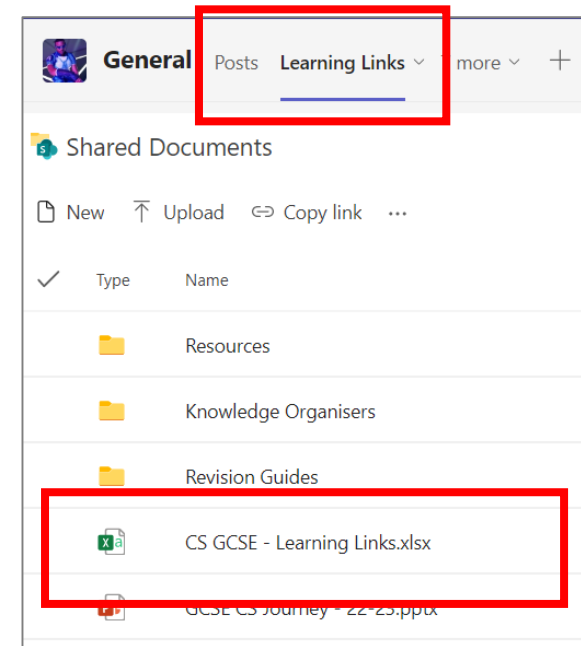
2. Click on **TEAMS**



3. Click on your students' Team with the initials of **Cp** in it



4. Find learning links in the dropdown bar at the top. Choose **CS GCSE Learning Links**



Using Learning Links

GCSE Specification Learning Links		Paper 1 ↓				Paper 2 ↓	
LO		Bitesize	CD	GCSE POD 3	OAK ACADEMY	SENECA	CGP Ref
	image, text file sizes)						
	1.2.4 Data storage						
	NUMBERS						
19	How to convert positive denary whole numbers to binary numbers (up to and including 8 bits) and vice versa		Converting between denary and 8 bit binary	https://members.gcsepod.co.uk/shared/podcasts/title/13838/83782	https://classroom.thenational.academy/lessons/binary-maths-68kac	Binary Arithmetic	98
20	How to add two binary integers together (up to and including 8 bits) and explain overflow errors which may occur	https://www.bbc.co.uk/bitesize/guides/zspfcw/revision/3	Adding two 8 bit binary integers	https://members.gcsepod.co.uk/shared/podcasts/title/13838/83790	https://classroom.thenational.academy/lessons/binary-maths-68kac		98
21	How to convert positive denary whole numbers into 2-digit hexadecimal numbers and vice versa	https://www.bbc.co.uk/bitesize/guides/zspfcw/revision/5	Converting between denary and 2 digit hexadecimal	https://members.gcsepod.co.uk/shared/podcasts/title/13838/83782			
22	How to convert from binary to hexadecimal equivalents and vice versa				https://classroom.thenational.academy/lessons/binary-maths-68kac		
23	Binary Shifts	https://www.bbc.co.uk/bitesize/guides/zspfcw/revision/4	Binary shifts	https://members.gcsepod.co.uk/shared/podcasts/title/13838/83790			105

BBC Bitesize topic and revision pages

GCSE Pod

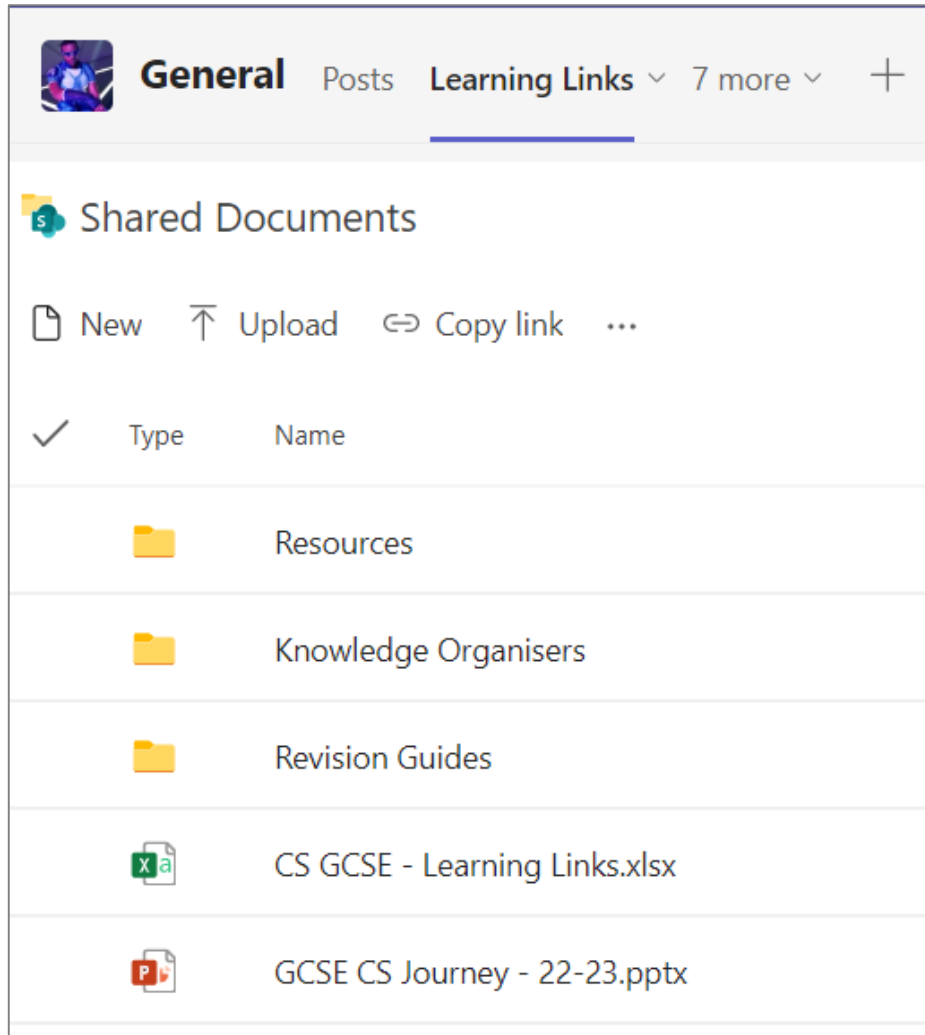
OAK Academy Lessons

Every Learning Objectives students need to know

CraigNDave computing videos

CGP Book Page Numbers

Also in Learning Links



- Class Resources
- Cheat Sheets
- Knowledge Organisers
- Programming Pamphlets
- Revision Guides
- And much more!