

Key Stage 3 Computing Scheme of work.

FOR MORE DETAILS AND RESOURCES PLEASE SEE GOOGLE CLASSROOM (ALL LESSONS MUST BE POSTED THERE)

Year 7 SOW				
Lesson	Unit	Content	Resources	Possible Homework
1	Topic 1: Getting started: Network and emails	Logging in, Folders, Google Classroom, Email	Network and Emails Booklet	Send an email
2		Baseline Test	Network and emails PPT 1 and 2	
3		Network and Emails		
4	Topic 2: Binary	Introduction	Binary Booklet	10 binary tests online for hwk or in class. Must be copied over.
5		Binary Conversion	Cisco Binary Game	
6		Binary Graphics	Binary online Test 1-10	
7		Binary Addition	Help Sheet	
8		Binary revision and assessment	Bitmap Activity	
	Bebras Challenge	One off lesson where students compete in an online competition	Student logins Link to website	
9	Topic 3: Python (Chatbot)	Intro to programming: Print and Input	Two online chatbots	
10		Variables and calculations	Teach programming lesson plan	
11		Data types and comments	4 lesson PowerPoints	
12		Maths quiz and If Statements	On computer assessment	Revision
13		Python Assessment	Revision PPT (3 Topics)	
Possible Christmas lessons include PPT Advent calendars				
14	Topic 4: DTP (System lifecycle)	Intro to DVD cover project	DTP Booklet	
15		Research DVD covers	DVD.dpp template	Sketch DVD Cover
16		Begin Implementation (Serif)	DVD.pub template	
17		Implementation (Import to Publisher)	Empty DVD covers	
18		Continue Implementation		Finish DVD Cover
19		Barcodes		
20		Feedback and review		
Possible lesson on Safer Internet week				
21	Topic 5: Spreadsheets	Introduction to formulas	Spreadsheet booklets	
22		Formatting a spreadsheet	Excel spreadsheets	
23		Spreadsheet functions	Lesson PowerPoints	

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24		Sort, filter and comparison operators	Revision PPT (3 Topics)	
25		Graphs		Revision
26		Modelling and assessment (If no year 7 exam)		
	Year 7 Exam	Will usually be around this time.		
27	Topic 6: Scratch Programming	Intro to scratch and sprite movement	Scratch Booklet Scratch PowerPoints	
28		Loops and drawing shapes		Scratch HW 1
29		Flowcharts and selection constructs		
30		More flowcharts and broadcast		Scratch HW 2
31		Creating a simple game (Keep the ball up)		
32		Creating a game (Helicopter)		
33+	There are further scratch lessons to use if necessary.			

Year 8 SOW				
Lesson	Unit	Content	Resources	Possible Homework
1	Topic 1: Boolean Logic	Folders, intro to Boolean logic	Boolean logic booklet Boolean Logic PowerPoint Logic Gate website	
2		Combining logic		Boolean practice
3		Revision and Assessment		
4	Topic 2: Technology	Hardware	Technology Booklet Technology PowerPoints 1-4	
5		Software		
6		History of computing		
7		The internet		
8		Assessment		
	Bebras Challenge	One off lesson where students compete in an online competition	Student logins Link to website	

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9	Topic 3: Python	Print, input, placeholders and arithmetic operators	CAS Python PowerPoints 1-6 Python Booklet Lesson plans	
10		Variables, data types and int		HW sheet 1
11		If statements in Python 1		
12		If statements in Python 2		HW Sheet 2
13		The random number function		
14		Loops in Python		
15		Assessment		
Lesson or two on Safer Internet week: Google Forms				
16	Topic 4: Databases	Datatypes and setting up a database	Database PowerPoints (Faircop) Database Booklet	
17		Sorting and queries 1		
18		Sorting and queries 2		Paper based queries
19		Relational databases and reports		
20		Forms and murder mystery		
21		Assessment		
22	Topic 5: Searching and sorting algorithms	Searching: Linear/Binary	Searching and sorting PowerPoint	
23		Sorting: Bubble/Merge		
Year 8 Exam usually around here				
27	Topic 6: Websites and HTML	HTML 1	Website Booklet Website PowerPoint HTML Instruction Booklet	
28		HTML 2		
29		Country research		Additional research
30		Website Banner (Optional Lesson)		
31		Creating site pages, editing the master page and adding banner in Serif WebPlus		Work on/Finish website
32		Navigation bar and home page		
		Develop website		
		Embedded images, finish and publish		
33+		Show students additional website features		

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Year 9 SOW				
Lesson	Unit	Content	Resources	Possible Homework
1	Topic 1: The Bigger Picture	Getting started and file types	TBC	
2		Laws: Copyright, GDPR, CMA		
3		Environmental Issues and impact		
4	Topic 2: Networks and the internet	Network Topologies	Network PPT 1-3 Worksheets	
5		Components of a network		Revision
6		Malware and network Security 1		
	Bebras Challenge	One off lesson where students compete in an online competition	Student logins Link to website	
7	Topic 3: Python Programming 2	Warm up: Selection and lists	CAS PPT 1-6 CAS worksheets Virtual Machine/IDLE	
8		Playlist: adding, removing, or modifying lists		L2 HW
9		In a while, crocodile: While loops		
10		The famous for: For loops		L4 HW
11		Make a thing: Mini Projects 1		
12		Wrap up: Mini Project 2		
13	Topic 4: Computer hardware	Hardware Components: CPU, RAM etc	Hardware PPT 1-3 Worksheets	
14		Fetch, decode, execute Cycle		
15		Storage devices		Revision
16		Storage devices 2		
Possible lesson on year 9 options				
17	Topic 5: Cybersecurity	You and your data: Data	CAS PPT 1-6 CAS worksheets	
18		Social Engineering		
19		Script Kiddies: Hacking		L3 HW
20		Rise of the bots: Recap malware		
21		There's no place like 127.0.0.1: Prevention		L5 HW
22		Under attack		

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23	Topic 6: Representation of data and sound using binary	Binary Mosaic: Pixels and resolution	CAS PPT 1-6 CAS worksheets Audacity/GIMP L5/6 may require headphones	L1 HW
24		A splash of colour: Bit depth, colours, file sizes		L2 HW
25		Collage: Image editing software		
26		Good vibrations: Sound in computers		L4 HW
27		Sonic playground: Sound editing software		
28		Always another way: Assessment		
29	Topic 7: Useful ICT skills for GCSE	Word Processing 1	For now, previous functional skills resources will be used	
30		Word Processing 2		
31		Presentation software		
32 +		Spreadsheets		