

Computing Curriculum Enrichment – Homework



Categories	Year7	Year 8	Year 9
Further Reading	Autumn 1: E Safety Facts - Staying Safe Online SWGfL	Autumn 1: A Quick Tour of Python Language Syntax A Whirlwind Tour of Python (jakevdp.github.io)	Autumn 1: Machine Learning: What it is and why it matters SAS UK
	A guide to safety on the internet with lots of helpful links and advice (for pupils and parents!)	Autumn 2:	Insights into the evolution of machine learning along with real life applications.
	Autumn 2: Learn IT with MR C	Event-driven programming — Ada Computer Science	Autumn 2: Computer Misuse Act 1990 (legislation.gov.uk)
	Interactive puzzles based on key Computational thinking principles What is computational thinking? - Introduction to computational thinking - KS3 Computer Science	An overview of event driven coding with tasks to try and links to a course. Heard on .NET Rocks! Ted Faison on Event-driven Design	Government website explaining the legal issues regarding misuse of computers and the implications of being found to have committed an offence.
	Re-cap key terminology with BBC bitesize.	Interview between experts of event driven coding with information about the key principles and real life examples.	
Films or Documentaries	Autumn 1: Internet Safety Tips for Teens - Helpful AND Funny - YouTube	Autumn 1: Python: The documentary- not out as yet (released Summer 2025)- watch this space! Trailer:	Autumn 1: Is Al an existential threat to human jobs? BBC News
	Key safety information. 6.42 mins Safer Internet Day 2025 – Live Lesson - BBC Teach	Python: The Documentary [OFFICIAL TRAILER]	A BBC news special looking at the concerns regarding AI and human employment. 20.37 mins.
	Interactive lesson with games to play and problems to solve. 28.58 mins	Autumn 2: Complete Python Turtle Graphics Overview! (From Beginner to Advanced)	Autumn 2: BBC DOCUMENTARY : Calculating Ada - The Countess of Computing 2015
	Autumn 2: Computational Thinking: An Introduction Computational thinking in 'real life' use in a public library.12.12 mins	A tutorial on aspects of the python turtle library and coding 39.28 mins Python Turtle Tutorial best graphics design	The story of Ada Lovelace, a ground breaking leader in the uses of computers. 58.43 mins
		Drawing a tree in python turtle 3.05 mins	

Education Visits	Autumn 1:	Autumn 1:	Autumn 1:
	Autumn 2:	Autumn 2:	Autumn 2:
Research Projects	Autumn 1: Use your Internet search skills to research the following: Why Wellington? Every year hundreds of thousands of people come to Somerset on holiday, so lets promote our town! Create a tourists guide to Wellington and the close surrounding area— think about what a visitor would need— should you include a map? What and where are the key places they should visit— remember to include useful information like opening ours or entry fees if that applies. Use pictures to show how nice the area is and make sure you include a range of attractions for all ages. Use sites like trip advisor or visit Somerset to get some ideas if you are stuck. Autumn 2: Scratch is an introductory programming language. As in the real world it is not the only language that can be used to program. Others include Python, Java, JavaScript, C++, Swift and Go. Pick 2 of these languages and find out some factswho created them? When? For what purpose? Find examples of the languages and explain how the code is set up and works.	Autumn 1: Guido van Rossum created python coding. Create a biography of Guido, research his history- birthplace, childhood etc. Through to his work histo- ry and where he is now. Include relevant details in terms of his work on py- thon coding from his first steps through to its re- lease in 1991. Autumn 2:	Autumn 1: Siri was introduced with the Apple iPhone 4s in 2011 Research what capabilities Siri was enabled with at the start, plot how the Al assistant has developed since its introduction. Create a timeline to show the changes. Autumn 2: Monitor the Live Cyber Threat Map Check Point website for 30 mins at a time at various times of the day/ week (3 different times or days would be good, more would be better!) Compare the results- where are the attacks coming from and where is being targeted? What establishments are being attacked? Are there patterns in the attacks? Hypothesize why these patterns might be emerginguse screenshots etc. To try to prove your hypothesis.