

Computer Science

Intent: Our intent at Key Stage 3 is for students to use digital technology safely, to know how to report abuse and to act responsibly and wisely on social media sites. We aim for students to use digital technology confidently, and to solve and communicate problems and solutions through developing algorithms that reflect computational thinking. We intend for students to create computer programs that solve practical problems and model real life situations and to understand how computers function and communicate.

Year	Half term	Content
7	a)	Using a network safely and effectively including managing an email account, managing folders, role of CEOP and computer misuse and data protection acts.
	b)	An introduction to using and creating algorithms. Using presentation software. Using the world wide web to research the history of computing.
	c)	Using spreadsheet software.
	d)	The hardware in a computer system.
	e)	Using Dreamweaver to create web pages.
	f)	Using SonicPi to create music with sequence, selection and iteration
8	a)	Computer modelling to forecast outcomes.
	b)	Development of algorithms including sequence, selection, input, output and variables.
	c)	Programming using Small Basic.
	d)	Construction of webpages using HTML.
	e)	Introduction of binary and units of memory.
	f)	Development of using multiple platforms to solve problems.
9	a)	How to spot fake news. Introduction to Python.
	b)	Sequence, selection, iteration and data types in Python.
	c)	Building a linked website using HTML and CSS.
	d)	Research the history of encryption. Make and use encryption algorithms.
	e)	Network communication protocols and topologies.

	f)	Further development of Python programming concepts using subroutines and graphical outputs.
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