Hodgson Academy

Computing (ICT)

KS3 Curriculum Overview

Computing (ICT): Year 7 Curriculum Overview

	Autumn Term		Spring Term		Summer Term	
	HT1 (6 Lessons)	HT2 (7 Lessons)	HT3 (6 Lessons)	HT4 (6 Lessons)	HT5 (6 Lessons)	HT6 (7 Lessons)
Year 7	**E-Safety: Digital reputation and online risks with Graphic Design (PowerPoint).** Understanding digital footprint, responsible information and photo sharing, online grooming, thinking critically about trustworthy and untrustworthy content online. Using power point creating mood boards, visualisation diagram, mind maps.	**Data Representation: Binary number system, Images, compression and vector graphics.** Understanding the binary number system, converting binary to denary and hexadecimal as well as learning binary addition. This is to build a solid foundation in data representation, then introducing them to bitmap and vector images also at the same time introducing the children to Inkscape to create logo and finally underrating the types of compression applied to images.	**Spreadsheets: Excel spreadsheet.** Understanding and researching and creating spreadsheet using mathematical formulae and functions like addition, subtraction, multiplication, division, SUM, PRODUCT, AVERAGE, MIN and MAX. Finally researching about supermarket prices for a dish and comparing the data using pie, bar charts and graphs.	**Computational Thinking: Algorithms & flowcharts** Students develop foundational skills in computational thinking, which involves solving problems, designing systems, and understanding human behaviour by drawing on concepts fundamental to computer science. By developing these computational thinking skills, students are equipped to approach problems methodically and creatively, laying the groundwork for programming.	**Game design & development** Game research, game play and objectives, level, objective and character designs, visualisation diagrams, storyboards, Scratch programming to design a game prototype.	**Blogging: using Media to support a cause** Developing understanding of how to use technology to create media to support a cause and raise public awareness and support. Develop Microsoft skills and understand if different media concepts and language to develop compelling Blog.

Computing (ICT): Year 8 Curriculum Overview

	Autumn Term		Spring Term		Summer Term	
	HT1 (7 Lessons)	HT2 (6 Lessons)	HT3 (6 Lessons)	HT4 (6 Lessons)	HT5 (5 Lessons)	HT6 (7 Lessons)
	E-Safety: Digital reputation and online risks	**Introduction to Networks: Hardware and software**	**Block Coding: Game design & development**	**Introducing programming constructs: Python programming**	**Technology in the modern world: Data protection act**	**Sorting and Searching: Binary, linear and Bubble Sorts**

Year 8	**Hardware and software**	Developing understanding of	Game research, game play and objectives, level, objective and character designs, visualisation diagrams, storyboards, Scratch programming to design a game prototype	Developing understanding of inputting and outputting data, variables and constructs, sequencing, relational and arithmetic operators. Debugging basic logical errors.	Developing understanding	Developing understanding of

Computing (ICT): Year 9 Curriculum Overview

	Autumn Term		Spring Term		Summer Term	
	HT1 (7 Lessons)	HT2 (6 Lessons)	HT3 (6 Lessons)	HT4 (6 Lessons)	HT5 (5 Lessons)	HT6 (6 Lessons)
Year 9	**ICT in the media** Developing understanding of echo chambers, filter bubbles, emotional manipulation techniques used in the media with a focus on social media campaigns. .	**Introducing programming constructs: Python programming** Developing understanding of inputting and outputting data, variables and constructs, sequencing, comparison and arithmetic operators. Debugging basic logical errors.	**Interactive Multimedia Product: PowerPoint** Developing PowerPoint skills to create an interactive multimedia product for a client brief, covering slide create, animations, slide transitions, internal hyperlinks, screen recording, image inserts, etc.	**Networks** Developing understanding of Hardware and software used in networks, advantages and disadvantages of networks, data transfer including Internet data packets.	**Technology in the modern world** Develop understanding of the challenges technology in the modern world is faced by and the legal implications and dangers attached such as Data Protection Act, Social engineering, malware and protection.	**Website development: Dreamweaver/ Google sites** Developing understanding of software packages that allow a purpose-built website for a user to navigate, including images, animations, links, text and other interactive website features.