Computing
Year 7
Curriculum Overview

THE HART SCHOOL

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
	Assessment 1			**Assessment 2**		
Core Course Topic: These topics are taught through the identified terms. They are taught in small bitesize chunks and revisited regularly.	**Using technologies safely and responsibly** **Introduction to MS Teams** **Knowledge Audit test**	**Using technologies safely and responsibly** **Basic Computing Skills**	**MS Teams** **Modelling Data - Spreadsheets**	**Understanding Computers & Networks**	**Programming Essentials 1** **Scratch**	**Programming Essentials 2** **Small Basic**
Additional support links:	https://www.thinkuknow.co.uk/	https://www.thinkuknow.co.uk/	https://www.bbc.co.uk/bitesize/guides/zdydmp3/revision/1	https://www.bbc.co.uk/bitesize/guides/zc6rcdm/revision/1	https://studio.code.org/home	https://studio.code.org/home
Knowledge: Included here is the specific knowledge your child will learn in detail	• How to create a secure and memorable password • How to create and organise files/folders on the school network/Cloud server • How the internet and social media can be used for positive self-promotion • Describe and assess the benefits and the potential risks of sharing information online • Describe what is appropriate to say and do in different online settings/ platforms (e.g. opinions, values, information, shares, 'likes', 'forwards').	• Basic Windows Skills • Using Office • Browsing, Email, Shortcuts • Keyboard skills – Typing • Folder structure • Advanced features of software. • Describe and assess the benefits and the potential risks of sharing information online • Describe what is appropriate to say and do in different online settings/ platforms (e.g. opinions, values, information, shares, 'likes', 'forwards'). • Understand the steps that should be taken to protect privacy online • Understand and implement good security practise: • Unique passwords for each account • Using privacy settings • Reviewing online activity • Actively keeping a "clean" digital footprint • Independently seek and use tools of common software packages effectively • Use the internet to seek guidance and help where necessary to work independently on given tasks. •	• Every cell has a unique reference which consists of letter (Columns) and a number (Rows) • There are two types of data that can be entered into a cell, data values or formula • A well formatted spreadsheet makes it easy to read • Unique cell reference which consists of letter (Columns) and numbers (Rows) • Data values and formula • Formatting techniques used in spreadsheet	• Hardware includes the physical components of the computer • Software includes the computer programs that run on the hardware • Computers function as input, process and output systems. Data is input, computation is performed, and an output response is given	• Sequence – putting instructions in the right order to make something happen • Selection – using conditions to control the flow of a program	• Sequence – putting instructions in the right order to make something happen • Selection – using conditions to control the flow of a program
Skills: Included here is the specific skills your	Be able to identify and report online safety issues	Ability to use the MS Suite effectively for use across the wider school curriculum and for electronic communication	Ability to use the MS Suite effectively for use across the wider school curriculum and for electronic communication	Network knowledge Difference between the WWW and the Internet Including LAN and WAN	Read and write simple algorithms Interpret Develop flowcharts and/or algorithms	Read and write simple algorithms Interpret Develop flowcharts and/or algorithms

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child will learn in detail	Identify components of computer systems and devices			Methods of remote working	Develop computational thinking skills	Develop computational thinking skills
Common Lexicon: These are the key words and terms learnt. These can be found on knowledge organisers.	E-safety KS3 NC: understand a range of ways to use technology safely, respectfully, responsibly, and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns.	Computer systems KS3 NC: understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems.	Input and output devices KS3 NC: understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems. Cells, rows, columns, formula, data, calculations, sorting, ascending, descending, filter.	Network technologies KS3 NC: Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems Understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem.	Algorithms and computational thinking KS3 NC: understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers [for example, binary addition, and conversion between binary and decimal]..	Algorithms and computational thinking KS3 NC: understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers [for example, binary addition, and conversion between binary and decimal]..
Core Course Topic: These topics are taught through the identified terms. They are taught in small bitesize chunks and revisited regularly.	Developing a proficiency for ICT programmes to prepare learners for a variety of vocational/life situations	Learners can use e-mail in order to communicate effectively and safely	Understanding of how the internet supports organisations in different ways	Develop problem solving techniques that can be applied across the curriculum.	Develop problem solving techniques that can be applied across the curriculum	Know the importance of testing Computing solutions and the impact