Computing Year 6 Long Term Plan

Key

Predominant Areas of Computing		
Information Technology	Computer Science	Digital Literacy

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 6	**Online Safety (6)** •Use filters when searching for digital content. •Explain in detail how accurate and reliable a webpage and its content is. •Compare a range of digital content sources and rate them in terms of content quality and accuracy. •Demonstrate safe and respectful use of a range of different technologies and online services. •Identify more discrete inappropriate behaviours online. For example, someone who	**Coding (3)** •Use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements. •Design a playable game with a timer and a score. • Plan and use selection and variables. • Understand how the launch command works. • Use functions and understand why they are useful. • Understand how functions are created and called. • Use flowcharts to create and debug code. • Create a simulation of	**Quizzing (6)** •Create a picture-based quiz for young children. • Learn how to use the question types within 2Quiz. • Explore the grammar quizzes. • Make a quiz that requires the player to search a database. • Make a quiz to test your teachers or parents.	**Networks (3)** •Learn about what the Internet consists of. • Find out what a LAN and a WAN are. • Find out how the Internet is accessed in school. • Research and find out about the age of the Internet. • Think about what the future might hold. •Explain the difference between the internet and the World Wide Web. (•	**Text Adventures (5)** • • Consider the intended audience carefully when I design and make digital content.	**Spreadsheets (8)** •Use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements. • Know what a spreadsheet looks like. • To navigate and enter data into cells. • Introduce some basic data formulae in Excel for percentages, averages and max and min numbers. • Demonstrate how the use of Excel can save time and effort when performing calculations.

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may be trying to groom me or someone else •Use critical thinking to help me stay safe online. •Know the value of protecting my privacy and others online. • Identify benefits and risks of mobile devices broadcasting the location of the user/device. • Identify secure sites by looking for privacy seals of approval. • Identify the benefits and risks of giving personal information. • Review the meaning of a digital footprint. • To have a clear idea of appropriate online behaviour. • Begin to understand how information online can persist. • Understand the importance of balancing game and screen time	a room in which devices can be controlled. • Understand how user input can be used in a program. • Understand how 2Code can be used to make a text-adventure game. •Test and debug my program as I work on it and use logical methods to identify a cause of a bug. •Decompose important aspects of a programming task in a logical way, identifying appropriate coding structures that would work. • Identify the important aspects of a programming task (abstraction). Translate algorithms that include sequence, selection and repetition into code and nest		• Use a spreadsheet to model a reallife situation. • Demonstrate how Excel can make complex data clear by manipulating the way it is presented. • Create a variety of graphs in Excel. • Apply spreadsheet skills to solving problems.

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with other parts of their lives. • Identify the positive and negative influences of technology on health and the environment. •Can explain in detail how accurate and reliable a webpage and its content is.	these structures within each other. • Use inputs and outputs within my coded programs such as sound, movement and buttons and represent the state of an object. • Interpret (understand) a program in parts and can make logical attempts to put the separate parts together in an algorithm to explain the program as a whole.				
Coding (3) •Use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements. •Design a playable game with a timer and a score. • Plan and use selection and variables. • Understand how the launch command works.	**Spreadsheets (5)** •Use a spreadsheet to investigate the probability of the results of throwing many dice. • Use a spreadsheet to calculate the discount and final prices in a sale. • Use a spreadsheet to plan how to spend pocket money and the	**Blogging (4)** •Design and create my own online blogs. • Identify the purpose of writing a blog. • Identify the features of a successful blog. • Plan the theme and content for a blog. • Understand how to write a blog and a blog post.		**Understanding Binary (4)** •Examine how whole numbers are used as the basis for representing all types of data in digital systems. • Recognise that digital systems represent all types of data using number codes that ultimately are patterns of 1s and 0s (called binary digits, which is why they	

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• Use functions and understand why they are useful. • Understand how functions are created and called. • Use flowcharts to create and debug code. • Create a simulation of a room in which devices can be controlled. • Understand how user input can be used in a program. • Understand how 2Code can be used to make a text-adventure game. •Test and debug my program as I work on it and use logical methods to identify a cause of a bug. •Decompose important aspects of a programming task in a logical way, identifying appropriate coding structures that would work.	effect of saving money. • Use a spreadsheet to plan a school charity day to maximise the money donated to charity.	• Consider the effect upon the audience of changing the visual properties of the blog. • Understand how to contribute to an existing blog. • Understand how and why blog posts are approved by the teacher. • Understand the importance of commenting on blogs. • Consider the intended audience carefully when I design and make digital content		are called digital systems). • Understand that binary represents numbers using 1s and 0s and these represent the on and off electrical states respectively in hardware and robotics.	

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• Identify the important aspects of a programming task (abstraction). Translate algorithms that include sequence, selection and repetition into code and nest these structures within each other. • Use inputs and outputs within my coded programs such as sound, movement and buttons and represent the state of an object. • Interpret (understand) a program in parts and can make logical attempts to put the separate parts together in an algorithm to explain the program as a whole.	

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