

Long Term Plan: Computing

| | Торіс | National Curriculum | Vocabulary | Knowledge | Skills | |
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| Year 6 | Online safety | Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration. Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact*. | Digital footprint Password PEGI rating Phishing Screen time Spoof website | 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. | To review the meaning of a digital footprint. To have a clear idea of appropriate online behaviour. To begin to understand how information online can persist. To understand the importance of balancing game and screen time with other parts of their lives. To identify the positive and negative influences of technology on health and the environment. | |
| | 6.4 blogging | Understand computer networks, including the Internet; how they can provide multiple services, | Audience Blog Blog page Blog post | To identify the purpose of writing a blog and its key features. | To understand the importance of regularly updating the | |

| | such as the World Wide Web; and the opportunities they offer for communication and collaboration. Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact*. | Collaborative Icon | To plan the theme and content for a blog and write the content. To consider the effect upon the audience of changing the visual properties of the blog. | content of a blog. To understand how to contribute to an existing blog. To understand how and why blog posts are approved by the teacher. To understand the importance of commenting on blogs. |
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| 6.6 Networks | Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration. | Internet World wide web Networks Router Network cables Local area Network (LAN) Wider area Network (WAN) Network cables | To find out what a LAN and a WAN are. To find out how the Internet is accessed in school. To research and find out about the age of the | To learn about what the Internet consists of. |

| | | Wireless | Internet. To think about what the future might hold. | |
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| 6.9 Spreadsheets (Excel) | Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. | Alignment calculate Cell Cell reference Charts Column Formula(e) Function Range Row Spreadsheet Style Sum Value Workbook Text wrapping | To navigate and enter data into cells. To introduce some basic data formulae in Excel for percentages, averages and max and min numbers. To demonstrate how the use of Excel can save time and effort when performing calculations. To use a spreadsheet to model a real-life situation. To demonstrate how Excel can make complex data clear by manipulating the way it is presented. To create a variety of graphs in Excel. | |
| 6.1 | Design, write and debug | Action | To use the | |

| Coding | programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. | Alert Algorithm Command Bug Output Input Debug/Debugging Flowchart Function Get input Flowchart bug Repeat Selection Design Mode Code Design Event If Object Control Alert Input If/Else Simulation Repeat Tabs | program design process, including flowcharts, to develop algorithms for more complex programs using and understanding of abstraction and decomposition to define the important aspects of the program. To code, test and debug from these designs. To use functions and tabs in 2Code to improve the quality of the code. To code user interactivity using input functions. |
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| Theme Key: | | | | | | | | | | | | | | | |
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| | Coding and Computational thinking | | Spreadsheets | | Internet and Email | | Art and Design | | Music | | Databases and graphing | | Writing and Presenting | | Communication and networks |