Computing Summary Document 2023- 2024

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| Year Group | Autumn 1 | Autumn 2 | | | Spring 1 | | Spring 2 | | Summer 1 | | | Summer 2 | |
| **Reception** |  |  | | |  | |  | |  | | |  | |
| **Year 1** | Unit 1.1  Online Safety & Exploring Purple Mash 4 lessons | Unit 1.2  Grouping & Sorting  2 lessons | | Unit 1.3 Pictograms  3 lessons  2Count | Unit 1.5  Maze Explorers  3 lessons  2Go | | Unit 1.7  Coding  6 lessons  2Code | | Unit 1.8 Spreadsheets  3 lessons  2Calculate | | | Unit 1.9 Technology outside school  2 lessons | |
| **Year 2** | Unit 2.2  Online Safety  3 lessons | | Unit 2.3 Spreadsheets  4 lessons  2Calculate | | Unit 2.4  Questioning  5 lessons  2Question 2Investigate | | Unit 2.6  Creating Pictures 5 lessons  2Paint | | Unit 2.1  Coding  6 lessons  2Code | | | Unit 2.8  Presenting Ideas  4 lessons | |
| **Year 3** | Unit 3.2  Online safety  3 lessons  2Email | Unit 3.5  Email (inc.  email safety)  6 lessons | Unit 3.4  Touch Typing  4 lessons  2Type | | Unit 3.1  Coding  6 lessons  2Code | | Unit 3.3 Spreadsheets  3 lessons 2Calculate  Unit 3.6  Branching Databases  4 lessons 2Question  2Simulate | | Unit 3.7 Simulations  3 lessons | Unit 3.8  Graphing  3 lessons  2Graph | | Unit 3.9  Presenting  6 lessons  PowerPoint or Google Slides | |
| **Year 4** | Unit 4.5  Logo  4 lessons  2Logo | Unit 4.2  Online Safety  4 lessons | | | Unit 4.3  Spreadsheets  6 lessons  2Calculate | | Unit 4.6  Animation  3 lesson  2Animate | | Unit 4.7  Effective Searching  3 lessons | | | | Unit 4.8 Hardware  Investigator  1 lesson |
| **Year 5** | Unit 5.1  Coding  6 lessons  2Code | Unit 5.2  Online Safety  3 lessons | | | Unit 5.3  Spreadsheet  6 lessons  2Calculate | Unit 5.4  Databases  4 lessons  2Investigate | Unit 5.5  Game Creator  5 lessons  2DIY 3D | Unit 5.6  3D Modelling  4 lessons  2Design & Make | Unit 5.7  Concept Maps  4 lessons  2Connect | | | Unit 5.8  Word Processing  8 lessons  MS Word or Google Docs | |
| **Year 6** | Unit 6.2  Online Safety  2 lessons | Unit 6.4  Blogging  4 lessons  2Blog | | | Unit 6.3  Spreadsheets  5 lessons  2Calculate | | Unit 6.6  Networks  3 lessons | | Unit 6.7  Quizzing  6 lessons  Scratch | | Unit 6.8  Understanding Binary  4 lessons | Unit 6.9  Spreadsheets  8 lessons  Excel or Google Sheets | |

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|  | Computer Science |  | Information Technology |  | Digital Literacy |

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| **National Curriculum Objective – KEY STAGE ONE** | Strand | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions | Computer Science | 1.2 1.4 1.5 1.7 | 2.1 |  |  |  |  |
| Create and debug simple programs | Computer Science | 1.5 1.7 | 2.1 |  |  |  |  |
| Use logical reasoning to predict the behaviour of simple programs | Computer Science | 1.5 1.7 | 2.1 |  |  |  |  |
| Use technology purposefully to create, organise, store, manipulate and retrieve digital content | Information Technology | 1.3 1.6 1.7 1.8 | 2.3 2.4 2.5 2.6 2.7 2.8 |  |  |  |  |
| Recognise common uses of information technology beyond school | Digital Literacy | 1.9 | 2.5\* |  |  |  |  |
| Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. | Digital Literacy | 1.1 | 2.2\* |  |  |  |  |
| **National Curriculum Objective – KEY STAGE TWO** |  |  |  |  |  |  |  |
| Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. | Computer Science |  |  | 3.1 | 4.1 4.5 | 5.1 5.5 | 6.1 6.5 6.8 |
| Use sequence, selection and repetition in programs; work with variables and various forms of input and output. | Computer Science |  |  | 3.1 | 4.1 4.5 | 5.1 | 6.1 6.5 |
| Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs | Computer Science |  |  | 3.1 | 4.1 4.5 | 5.1 | 6.1 6.5 6.8 |
| 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. | Computer Science |  |  | 3.5 | 4.2 4.7 4.8 | 5.2 | 6.2 6.4 6.6 |
| Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content | Information Technology |  |  |  | 4.7 | \*\*  . | 6.2 |
| 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. | Information Technology |  |  | 3.3 3.4 3.5 3.6 3.7 3.8 3.9 | 4.1 4.3 4.4 4.6 4.9 | 5.1 5.3 5.4 5.5 5.6 5.7 5.8 | 6.1 6.3 6.4 6.5 6.7 6.8 6.9 |
| Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. | Digital Literacy |  |  | 3.2 3.5 3.9 | 4.2 | 5.2 | 6.2 6.4 |

.\* And in other units when appropriate. \*\* Various Search technologies are taught more specifically in unit 4.7. Children will utilize this knowledge in many Internet based sessions in all areas of the curriculum.

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| **Reception** |  |  | | | |  | |  | | |  | | | |  | |
| To Code | | | | | To Collect | | | | To communicate | | | | | To connect | | |
| Write and test simple programs.   * To know that an algorithm is a set of instructions and that the order is important * To know how to identify a problem within a simple algorithm and how to fix it | | | | | Sort and group data   * To know examples for a variety of criteria, e.g. eye colour, house type * To know the difference between sorting and grouping * To know how to sort or group items using a range of criteria   Navigate a simple spreadsheet and add data   * To understand what rows and columns are * To know how to enter data into cells * To add images to a spreadsheet * To know how to do simple calculations in a spreadsheet | | | | Know how to use technology purposefully to create and store digital content   * To know how to paint with different colours and brushes. * To know how to create shapes and fill areas * To know how to add text to an page / image * To use simple edit tools (undo and redo) | | | | | Recognise the common uses of information technology beyond school.   * To identify and know how technology is used in school and beyond.   Understand how to communicate safely online.   * To know what personal information is and how to keep it safe. * To know how to be respectful (online and offline). * To recognise and report inappropriate behaviour (online and offline). | | |
| **Year 1** | Unit 1.1  Online Safety & Exploring Purple Mash 4 lessons | Unit 1.2  Grouping & Sorting  2 lessons | | Unit 1.3 Pictograms  3 lessons  2Count | | Unit 1.5  Maze Explorers  3 lessons  2Go | | Unit 1.7  Coding  6 lessons  2Code | | | Unit 1.8 Spreadsheets  3 lessons  2Calculate | | | | Unit 1.9 Technology outside school  2 lessons | |
| **Year 2** | Unit 2.2  Online Safety  3 lessons | | Unit 2.3 Spreadsheets  4 lessons  2Calculate | | | Unit 2.4  Questioning  5 lessons  2Question 2Investigate | | Unit 2.6  Creating Pictures 5 lessons  2Paint | | | Unit 2.1  Coding  6 lessons  2Code | | | | Unit 2.8  Presenting Ideas  4 lessons | |
| **Year 3** | Unit 3.2  Online safety  3 lessons  2Email | Unit 3.5  Email (inc.  email safety)  6 lessons | Unit 3.4  Touch Typing  4 lessons  2Type | | | Unit 3.1  Coding  6 lessons  2Code | | Unit 3.3 Spreadsheets  3 lessons 2Calculate  Unit 3.6  Branching Databases  4 lessons 2Question  2Simulate | | | Unit 3.7 Simulations  3 lessons | Unit 3.8  Graphing  3 lessons  2Graph | | | Unit 3.9  Presenting  6 lessons  PowerPoint or Google Slides | |
| **Year 4** | Unit 4.5  Logo  4 lessons  2Logo | Unit 4.2  Online Safety  4 lessons | | | | Unit 4.3  Spreadsheets  6 lessons  2Calculate | | Unit 4.6  Animation  3 lesson  2Animate | | | Unit 4.7  Effective Searching  3 lessons | | | | | Unit 4.8 Hardware  Investigator  1 lesson |
| **Year 5** | Unit 5.1  Coding  6 lessons  2Code | Unit 5.2  Online Safety  3 lessons | | | | Unit 5.3  Spreadsheet  6 lessons  2Calculate | Unit 5.4  Databases  4 lessons  2Investigate | Unit 5.5  Game Creator  5 lessons  2DIY 3D | | Unit 5.6  3D Modelling  4 lessons  2Design & Make | Unit 5.7  Concept Maps  4 lessons  2Connect | | | | Unit 5.8  Word Processing  8 lessons  MS Word or Google Docs | |
| **Year 6** | Unit 6.2  Online Safety  2 lessons | Unit 6.4  Blogging  4 lessons  2Blog | | | | Unit 6.3  Spreadsheets  5 lessons  2Calculate | | Unit 6.6  Networks  3 lessons | | | Unit 6.7  Quizzing  6 lessons  Scratch | | Unit 6.8  Understanding Binary  4 lessons | | Unit 6.9  Spreadsheets  8 lessons  Excel or Google Sheets | |

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| **Year 2** |  | |  | |  | |  | | Unit 2.1  Coding  6 lessons  2Code | | |  | |
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