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 1.1Online Safety & Exploring Purple Mash 4 lessons | Unit 1.2 Grouping & Sorting 2 lessons | Unit 1.3 Pictograms 3 lessons2Count | Unit 1.5 Maze Explorers 3 lessons2Go | Unit 1.7 Coding 6 lessons2Code | Unit 1.8 Spreadsheets3 lessons2Calculate | Unit 1.9 Technology outside school 2 lessons |
| **Year 2** | Unit 2.2 Online Safety 3 lessons | Unit 2.3 Spreadsheets 4 lessons2Calculate | Unit 2.4 Questioning 5 lessons 2Question 2Investigate | Unit 2.6 Creating Pictures 5 lessons2Paint  | Unit 2.1 Coding 6 lessons2Code | 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 lessons2Code | Unit 3.3 Spreadsheets 3 lessons 2CalculateUnit 3.6 Branching Databases 4 lessons 2Question2Simulate | Unit 3.7 Simulations 3 lessons | Unit 3.8 Graphing 3 lessons2Graph | Unit 3.9 Presenting 6 lessonsPowerPoint or Google Slides |
| **Year 4** | Unit 4.5 Logo 4 lessons2Logo | Unit 4.2 Online Safety 4 lessons | Unit 4.3 Spreadsheets 6 lessons2Calculate | Unit 4.6 Animation3 lesson2Animate | Unit 4.7 Effective Searching 3 lessons | Unit 4.8 Hardware Investigator 1 lesson |
| **Year 5** | Unit 5.1 Coding 6 lessons2Code | Unit 5.2 Online Safety 3 lessons | Unit 5.3 Spreadsheet 6 lessons2Calculate  | Unit 5.4 Databases 4 lessons2Investigate | Unit 5.5 Game Creator 5 lessons2DIY 3D | Unit 5.6 3D Modelling 4 lessons2Design & Make | Unit 5.7 Concept Maps 4 lessons2Connect | Unit 5.8 Word Processing 8 lessonsMS Word or Google Docs |
| **Year 6** | Unit 6.2 Online Safety 2 lessons | Unit 6.4 Blogging 4 lessons2Blog | Unit 6.3 Spreadsheets 5 lessons2Calculate | Unit 6.6 Networks 3 lessons | Unit 6.7 Quizzing 6 lessonsScratch | Unit 6.8 Understanding Binary 4 lessons | Unit 6.9 Spreadsheets 8 lessonsExcel 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).
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