# English National Curriculum Objectives (Key Stage 1)

| National Curriculum Objective | Strand | Units |
|---|---|---|
| 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 | 1.4 1.5 1.7 |
| Create and debug simple programs | Computer Science | 1.5 1.7 |
| Use logical reasoning to predict the behaviour of simple programs. | Computer Science | 1.5 1.7 |
| Use technology purposefully to create, organise, store, manipulate and retrieve digital content | Information Technology | 1.2 1.3 1.6 1.7 1.8 |
| Recognise common uses of information technology beyond school | Digital Literacy | 1.9 |
| 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 |

# Year 1 Whole Year Overview

| Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR 1** | **Unit 1.1**<br>**Online Safety &**<br>**Exploring Purple**<br>**Mash**<br><br>**Number of**<br>**Weeks** – 4<br>**Tools Used** –<br>Avatar creator<br>Paint Projects<br>Writing<br>Templates<br>2Count<br>(Pictograms)<br>2Explore (Music) | | | | **Unit 1.2**<br>**Grouping**<br>**& Sorting**<br><br>**Weeks** – 2<br>**Programs**<br>– 2Quiz | | **Unit 1.3**<br>**Pictograms**<br><br>**Weeks** – 3<br>**Programs** –<br>2Count<br>2Connect | | | **Unit 1.4**<br>**Lego Builders**<br><br>**Weeks** – 3<br>**Programs** –<br>2Quiz<br>Paint Projects<br>Writing<br>Templates | | | **Unit 1.5**<br>**Maze**<br>**Explorers**<br><br>**Weeks** – 3<br>**Programs** –<br>2Go | | | **Unit 1.6**<br>**Animated Story**<br>**Books**<br><br>**Weeks** – 5<br>**Programs** –<br>2Create A Story | | | | | **Unit 1.7**<br>**Coding**<br><br>**Weeks** – 6<br>**Programs** – 2Code | | | | | | **Unit 1.8**<br>**Spreadsheets**<br><br>**Weeks** – 3<br>**Programs** –<br>2Calculate | | | **Unit 1.9**<br>**Technology**<br>**outside**<br>**school**<br><br>**Weeks** – 2<br>**Programs** –<br>Writing<br>Templates | |

# English National Curriculum Objectives (Key Stage 1)

| National Curriculum Objective | Strand | Units |
|---|---|---|
| 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 | 2.1 |
| Create and debug simple programs | Computer Science | 2.1 |
| Use logical reasoning to predict the behaviour of simple programs. | Computer Science | 2.1 |
| Use technology purposefully to create, organise, store, manipulate and retrieve digital content | Information Technology | 2.3 2.4 2.5 2.6 2.7 2.8 |
| Recognise common uses of information technology beyond school | Digital Literacy | 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 | 2.2* |

*And in other units when appropriate.

# Year 2 Whole Year Overview

| Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR 2** | **Unit 2.1 Coding**<br><br>**Number of Weeks – 5**<br><br>**Main Programs –** 2Code | | | | | **Unit 2.2 Online Safety**<br><br>**Weeks – 3**<br>**Programs -** Writing Templates Display boards 2Respond (2Email) | | | **Unit 2.3 Spreadsheets**<br><br>**Weeks – 4**<br>**Programs –** 2Calculate | | | | **Unit 2.4 Questioning**<br><br>**Weeks – 5**<br>**Programs –** 2Question, 2Investigate 2Calculate | | | | | **Unit 2.5 Effective Searching**<br><br>**Weeks – 3**<br>**Programs** – Browser 2Quiz Writing Templates | | | **Unit 2.6 Creating Pictures**<br><br>**Weeks – 5**<br>**Programs –** 2Paint A Picture Writing Templates | | | | | **Unit 2.7 Making Music**<br><br>**Weeks – 3**<br>**Programs –** 2Sequence | | | **Unit 2.8 Presenting Ideas**<br><br>**Weeks – 4**<br>**Programs –** 2Connect (Mind Map) 2Create a Story (ebook) 2Quiz Writing Templates | | | |

# English National Curriculum Objectives (Key Stage 2)

| National Curriculum Objective | Strand | Units |
|---|---|---|
| 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 |
| Use sequence, selection and repetition in programs; work with variables and various forms of input and output. | Computer Science | 3.1 |
| Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs | Computer Science | 3.1 |
| 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 |
| Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. | Information Technology | |
| 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 | 3.4 3.5 3.6 3.7 3.8 |
| 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 |

# Year 3 Whole Year Overview

| Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR 3** | **Unit 3.1**<br>**Coding**<br><br>**Number of Weeks** – 6<br>**Main Programs** – 2Code | | | | | | **Unit 3.2**<br>**Online Safety**<br><br>**Weeks** – 3<br>**Programs** –<br>2Connect (Mind Map)<br>2Blog (Blogging)<br>Writing Templates<br> Display boards | | | **Unit 3.3**<br>**Spreadsheets**<br><br>**Weeks** – 3<br>**Programs** –<br>2Calculate | | | **Unit 3.4**<br>**Touch-Typing**<br><br>**Weeks** – 4<br>**Programs** –<br>2Type | | | | **Unit 3.5**<br>**Email**<br>(including email safety)<br><br>**Weeks** – 6<br>**Programs** – 2Email | | | | | | **Unit 3.6**<br>**Branching**<br>**Databases**<br><br>**Weeks** – 4<br>**Programs** –<br>2Question | | | | **Unit 3.7**<br>**Simulations**<br><br>**Weeks** – 3<br>**Programs** –<br>2Simulate,<br>Writing Templates | | | **Unit 3.8**<br>**Graphing**<br><br>**Weeks** – 3<br>**Programs** –<br>2Graph<br>Writing Templates<br>2Blog (Blogging) | | |

**Unit 3.9**
**Using Microsoft**
**PowerPoint**

(Optional Unit)
**Number of Lessons** – 6

**Main program** – MS PowerPoint

# English National Curriculum Objectives (Key Stage 2)

| National Curriculum Objective | Strand | Units |
|---|---|---|
| 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 | 4.1 4.5 |
| Use sequence, selection and repetition in programs; work with variables and various forms of input and output. | Computer Science | 4.1 4.5 |
| Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs | Computer Science | 4.1 4.5 |
| 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 | 4.2 4.7 4.8 |
| Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. | Information Technology | 4.7 |
| 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 | 4.1 4.3 4.4 4.6 4.9 |
| Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. | Digital Literacy | 4.2* |

*And discussed in other units

# Year 4 Whole Year Overview

| Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR 4** | **Unit 4.1 Coding** <br><br> Number of Weeks – 6 <br> Main Programs – 2Code | | | | | | **Unit 4.2 Online Safety** <br><br> Weeks – 4 <br> Programs - 2Connect (Mind Map) 2Publish Plus Display boards | | | | **Unit 4.3 Spreadsheets** <br><br> Weeks – 5 <br> Programs – 2Calculate | | | | | **Unit 4.4 Writing for Different Audiences** <br><br> Weeks – 5 <br> Programs – Writing Templates 2Simulate 2Connect (Mind Map) 2Publish Plus | | | | | **Unit 4.5 Logo** <br><br> Weeks – 4 <br> Programs – 2Logo | | | | **Unit 4.6 Animation** <br><br> Weeks – 3 <br> Programs – 2Animate | | | **Unit 4.7 Effective Searching** <br><br> Weeks – 3 <br> Programs – Browser 2Quiz 2Connect (Mind Map) | | | **Unit 4.8 Hardware Investigators** <br><br> Weeks – 2 <br> Programs – 2Quiz 2Connect (Mind Map) Writing Templates | |

**Unit 4.9**
**Making Music**

(Optional Unit)
**Number of Lessons** – 4

**Main Program** – Busy Beats

# English National Curriculum Objectives (Key Stage 2)

| National Curriculum Objective | Strand | Units |
|---|---|---|
| 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 | 5.1<br>5.5 |
| Use sequence, selection and repetition in programs; work with variables and various forms of input and output. | Computer Science | 5.1 |
| Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. | Computer Science | 5.1 |
| 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 | 5.2 |
| Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. | Information Technology | Various<br>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. |
| 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 | 5.1      5.3<br>5.4      5.5<br>5.6      5.7<br>5.8 |
| Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. | Digital Literacy | 5.2 and discussed in other units |

# Year 5 Whole Year Overview

| Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR 5** | **Unit 5.1 Coding**<br><br>**Number of Weeks** – 6<br>**Main Programs** – 2Code | | | | | | **Unit 5.2 Online Safety**<br><br>**Weeks** – 3<br>**Programs** - 2Publish Plus Writing Templates Display boards 2Connect (Mind Map) | | | **Unit 5.3 Spreadsheets**<br><br>**Weeks** – 6<br>**Programs** – 2Calculate | | | | | | **Unit 5.4 Databases**<br><br>**Weeks** – 4<br>**Programs** – 2Investigate (database) Avatar creator | | | | **Unit 5.5 Game Creator**<br><br>**Weeks** – 5<br>**Programs** – 2DIY 3D Writing Templates 2Blog (Blogging) | | | | | **Unit 5.6 3D Modelling**<br><br>**Weeks** – 4<br>**Programs** – 2Design and Make Writing Templates | | | | **Unit 5.7 Concept Maps**<br><br>**Weeks** – 4<br>**Programs** – 2Connect | | | |

**Unit 5.8**

**Microsoft Word**

(Optional Unit)
**Number of Lessons** – 8

**Main program** – MS Word

# English National Curriculum Objectives (Key Stage 2)

| National Curriculum Objective | Strand | Units |
|---|---|---|
| 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 | 6.1<br>6.5, 6.9 |
| Use sequence, selection and repetition in programs; work with variables and various forms of input and output. | Computer Science | 6.1 |
| Use sequence, selection and repetition in programs; work with variables and various forms of input and output. | Computer Science | 6.5 |
| Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. | Computer Science | 6.1<br>6.5, 6.9 |
| 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 | 6.2 |
| 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 | 6.4 |
| 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 | 6.6 |
| Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. | Information Technology | 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 | 6.1, 6.3<br>6.4, 6.5<br>6.7, 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 | 6.2<br>6.4 |

*And discussed in other units.

# Year 6 Whole Year Overview

| Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| YEAR 6 | **Unit 6.1 Coding**<br><br>**Number of Weeks** – 6<br>**Main Programs** – 2Code | | | | | | **Unit 6.2 Online Safety**<br><br>**Weeks** – 3<br>**Programs** -<br>2DIY 3D<br>2DIY<br>2Code<br>  2Blog<br>  (Blogging) | | | **Unit 6.3 Spreadsheets**<br><br>**Weeks** – 5<br>**Programs** – 2Calculate | | | | | **Unit 6.4 Blogging**<br><br>**Weeks** – 4<br>**Programs** – 2Blog | | | | **Unit 6.5 Text Adventures**<br><br>**Weeks** – 5<br>**Programs** – 2Code, 2Connect, 2Create a Story, Writing Templates | | | | | **Unit 6.6 Networks**<br><br>**Weeks** – 3<br>**Programs** – 2Connect (Mind Map)<br>Writing Templates | | | | **Unit 6.7 Quizzing**<br><br>**Weeks** – 6<br>**Programs** – 2DIY<br>2Quiz<br>Text Toolkit<br>2Investigate (database) | | | |

There are two optional units that can be used in addition to the above units:

| | |
|---|---|
| **Unit 6.8**<br>**Understanding Binary**<br>(Optional Unit)<br><br>**Number of Lessons** – 4<br><br>**Main programs** – 2Connect, (Mind Map), 2Question (Binary Databases), Writing Templates, 2Code | **Unit 6.9**<br>**Microsoft Excel**<br>(Optional Unit)<br><br>**Number of Lessons** – 8<br><br>**Main program** – MS Excel |