



## Computing Long Term Plan

# Units by Year Group – Single Age Classes

## Theme Key:

|  |  |  |  |   |  |  |  |
|--|--|--|--|---|--|--|--|
|  Coding and Computational thinking |  Spreadsheets |  Internet and Email |  Art and Design |  Music |  Databases and graphing |  Writing and Presenting |  Communication and networks |
|--|--|--|--|---|--|--|--|

| 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 & Exploring Purple Mash<br>Weeks – 4<br>Programs – Various |   |   |   | Unit 1.2<br>Grouping & Sorting<br>Weeks – 2<br>Programs – 2DIY |   | Unit 1.3<br>Pictograms<br>Weeks – 3<br>Programs – 2Count |   | Unit 1.4<br>Lego Builders<br>Weeks – 3<br>Programs – 2DIY |    | Unit 1.5<br>Maze Explorers<br>Weeks – 3<br>Programs – 2Go |    | Unit 1.6<br>Animated Story Books<br>Weeks – 5<br>Programs – 2Create A Story |    |    | Unit 1.7<br>Coding<br>Weeks – 6<br>Programs – 2Code |    |    | Unit 1.8<br>Spreadsheets<br>Weeks – 3<br>Programs – 2Calculate |    | Unit 1.9<br>Technology outside school<br>Weeks – 2<br>Programs – Various |    |    |    |    |    |    |    |    |    |    |

| 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<br>Coding<br>Weeks – 5<br>Programs – 2Code |   |   |   |   | Unit 2.2<br>Online Safety<br>Weeks – 3<br>Programs – Various |   | Unit 2.3<br>Spreadsheets<br>Weeks – 4<br>Programs – 2Calculate |   |    | Unit 2.4<br>Questioning<br>Weeks – 5<br>Programs – 2Question, 2Investigate |    |    |    | Unit 2.5<br>Effective Searching<br>Weeks – 3<br>Programs – Browser |    | Unit 2.6<br>Creating Pictures<br>Weeks – 5<br>Programs – 2PaintAPicture |    |    | Unit 2.7<br>Making Music<br>Weeks – 3<br>Programs – 2Sequence |    | Unit 2.8<br>Presenting Ideas<br>Weeks – 4<br>Programs – Various |    |    |    |    |    |    |    |    |    |    |

| 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 | <b>Unit 3.1<br/>Coding</b> |   |   |   |   |   | <b>Unit 3.2<br/>Online safety</b> |   |   | <b>Unit 3.3<br/>Spreadsheets</b> |    |    | <b>Unit 3.4<br/>Touch Typing</b> |    |   |    | <b>Unit 3.5<br/>Email<br/>(including email safety)</b> |    |                          |    |    | <b>Unit 3.6<br/>Branching<br/>Databases</b> |    |  | <b>Unit 3.7<br/>Simulations</b> |  | <b>Unit 3.8<br/>Graphing</b> |    |    |    |    |    |    |
|        | Number of Weeks – 6        |   |   |   |   |   | Weeks – 3                         |   |   | Weeks – 3                        |    |    | Weeks – 4                        |    |   |    | Weeks – 6  |    |                          |    |    | Weeks – 4                                   |    |  | Weeks – 3                       |  | Weeks – 3                    |    |    |    |    |    |    |
|        | Main Programs – 2Code      |   |   |   |   |   | Programs – Various                |   |   | Programs – 2Calculate            |    |    | Programs – 2Type                 |    |   |    | Programs – 2Email, 2Connect, 2DIY                      |    |                          |    |    | Programs – 2Question                        |    |  | Programs – 2Simulate, 2Publish  |  | Programs – 2Graph            |    |    |    |    |    |    |
| 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 | 33 |
| YEAR 4 | <b>Unit 4.1<br/>Coding</b> |   |   |   |   |   | <b>Unit 4.2<br/>Online safety</b> |   |   | <b>Unit 4.3<br/>Spreadsheets</b> |    |    |                                  |    | <b>Unit 4.4<br/>Writing for different<br/>audiences</b> |    |  |    | <b>Unit 4.5<br/>Logo</b> |    |    | <b>Unit 4.6<br/>Animation</b>               |    | <b>Unit 4.7<br/>Effective<br/>Search</b> |                                 | <b>Unit 4.8<br/>Hardware<br/>Investigators</b> |                              |    |    |    |    |    |    |
|        | Number of Weeks – 6        |   |   |   |   |   | Weeks – 4                         |   |   | Weeks – 6                        |    |    |                                  |    | Weeks – 5   |    |  |    | Weeks – 4                |    |    | Weeks – 3                                   |    | Weeks – 3                                |                                 | Weeks – 2                                      |                              |    |    |    |    |    |    |
|        | Main Programs – 2Code      |   |   |   |   |   | Programs – Various                |   |   | Programs – 2Calculate            |    |    |                                  |    | Programs – 2Email, 2Connect, 2DIY                       |    |  |    | Programs – Logo          |    |    | Programs – 2Animate                         |    | Programs – Browser                       |                                 |  |                              |    |    |    |    |    |    |

**Unit 3.9  
Presenting (with  
Microsoft PowerPoint)**

(Optional Unit)  
Number of Lessons – 5  
or 6 (version dependent)  
Main Program – MS  
PowerPoint

**Unit 4.9  
Making Music**

(Optional Unit)  
Number of Lessons – 4

Main Program – Busy  
Beats

| 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 | <b>Unit 5.1<br/>Coding</b> |   |   |   |   |   | <b>Unit 5.2<br/>Online safety</b> |   |   | <b>Unit 5.3<br/>Spreadsheets</b> |    |    |    |    |    | <b>Unit 5.4<br/>Databases</b>      |    |    | <b>Unit 5.5<br/>Game Creator</b> |    |    | <b>Unit 5.6<br/>3D Modelling</b> |    |    | <b>Unit 5.7<br/>Concept Maps</b> |    |    |    |    |    |    |    |
|        | Number of Weeks – 6        |   |   |   |   |   | Weeks – 3                         |   |   | Weeks – 6                        |    |    |    |    |    | Weeks – 4                          |    |    | Weeks – 5                        |    |    | Weeks – 4                        |    |    | Weeks – 4                        |    |    |    |    |    |    |    |
|        | Main Programs – 2Code      |   |   |   |   |   | Programs - Various                |   |   | Programs – 2Calculate            |    |    |    |    |    | Programs – 2Question, 2Investigate |    |    | Programs – 2DIY 3D               |    |    | Programs – 2Design and Make      |    |    | Programs – 2Connect              |    |    |    |    |    |    |    |

**Unit 5.8**  
**Word processing (with Microsoft Word)**

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

**Main program – MS Word**

| 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* | <b>Unit 6.1<br/>Coding</b> |   |   |   |   |   | <b>Unit 6.2<br/>Online safety</b> |   | <b>Unit 6.3<br/>Spreadsheets</b> |    |    |    | <b>Unit 6.4<br/>Blogging</b> |    |    |    | <b>Unit 6.5<br/>Text Adventures</b> |    |    | <b>Unit 6.6<br/>Networks</b> |    | <b>Unit 6.7<br/>Quizzing</b>                       |    |    |    |    |    |    |    |    |    |    |
|         | Number of Weeks – 6        |   |   |   |   |   | Weeks – 2                         |   | Weeks – 5                        |    |    |    | Weeks – 5                    |    |    |    | Weeks – 5                           |    |    | Weeks – 3                    |    | Weeks – 6  |    |    |    |    |    |    |    |    |    |    |
|         | Main Programs – 2Code      |   |   |   |   |   | Programs - Various                |   | Programs – 2Calculate            |    |    |    | Programs – 2Blog             |    |    |    | Programs – 2Code, 2Connect          |    |    |                              |    | Programs – 2Quiz, 2DIY, Text Toolkit, 2Investigate |    |    |    |    |    |    |    |    |    |    |

**Unit 6.8  
Understanding Binary**  
  
(Optional Unit)  
**Number of Lessons – 4**  
  
Main Program – 2Code

**Unit 6.9  
Spreadsheets (with  
Microsoft Excel)**  
  
(Optional Unit)  
**Number of Lessons – 8**  
  
Main program – MS  
Excel

# Units by Year Group – Mixed Age Classes

## Theme Key:

|  |  |  |  |   |  |  |  |
|--|--|--|--|---|--|--|--|
|  Coding and Computational thinking |  Spreadsheets |  Internet and Email |  Art and Design |  Music |  Databases and graphing |  Writing and Presenting |  Communication and networks |
|--|--|--|--|---|--|--|--|

In Year 1 and 2 coding, the lessons need to be taught in sequence as each lesson introduces skills that are consolidated and developed in the next lesson. Therefore, it is proposed to teach coding for 11 weeks in Cycle A and none in Cycle B. It is also beneficial for all children to recap unit 1.1 in both cycles as this introduces children new to the class with key skills needed to make the most of Purple Mash.

| 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 | 33 |
|----------------------|--|---|---|---|--|---|---|---|---|----|--|----|--|----|---|----|----|----|--|----|---|----|----|----|---|----|----|----|----|----|----|----|----|
| YEAR 1 & 2 – CYCLE A | Unit 1.1<br>Online Safety & Exploring Purple Mash<br>Weeks – 4<br>Programs – Various |   |   |   | Unit 2.5<br>Effective Searching<br>Weeks – 3<br>Programs – Browser |   |   | Unit 1.4<br>Lego Builders<br>Weeks – 3<br>Programs – 2DIY |   |    | Unit 1.9<br>Technology outside school<br>Weeks – 2<br>Programs – Various |    | Unit 1.2<br>Grouping & Sorting<br>Weeks – 2<br>Programs – 2DIY |    | Unit 2.6<br>Creating Pictures<br>Weeks – 5<br>Programs – 2PaintAPicture |    |    |    | Unit 1.8<br>Spreadsheets<br>Weeks – 3<br>Programs – 2Calculate |    | Unit 1.7<br>Coding<br>Weeks – 6<br>Programs – 2Code |    |    |    | Unit 2.1<br>Coding<br>Weeks – 5<br>Programs – 2Code |    |    |    |    |    |    |    |    |

| 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 | 33 | 34 |
|----------------------|--|---|---|---|---|---|---|--|---|----|----|----|--|----|---|----|----|----|---|----|--|----|--|----|---|----|----|----|----|----|----|----|----|----|
| YEAR 1 & 2 – CYCLE B | Unit 1.1<br>Online Safety & Exploring Purple Mash<br>Weeks – 4<br>Programs – Various |   |   |   | Unit 1.5<br>Maze Explorers<br>Weeks – 3<br>Programs – 2Go |   |   | Unit 2.4<br>Questioning<br>Weeks – 5<br>Programs – 2Question, 2Investigate |   |    |    |    | Unit 2.2<br>Online Safety<br>Weeks – 3<br>Programs – Various |    | Unit 1.6<br>Animated Story Books<br>Weeks – 5<br>Programs – 2Create A Story |    |    |    | Unit 2.7<br>Making Music<br>Weeks – 3<br>Programs – 2Sequence |    | Unit 2.3<br>Spreadsheets<br>Weeks – 4<br>Programs – 2Calculate |    | Unit 1.3<br>Pictograms<br>Weeks – 3<br>Programs – 2Count |    | Unit 2.8<br>Presenting Ideas<br>Weeks – 4<br>Programs – Various |    |    |    |    |    |    |    |    |    |

| 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 & 4 CYCLE A | Coding                        |   |   |   |   |   | Unit 3.2<br>Online safety |   |   | Unit 3.3<br>Spreadsheets |    |    | Unit 3.4<br>Touch Typing |    |    |  | Unit 3.5<br>Email<br>(including email safety) |    |    |                  |    | Unit 3.6<br>Branching<br>Databases |    |                                 | Unit 3.7<br>Simulations           |                                       | Unit 3.8<br>Graphing |    |    |    |    |    |    |
|                    | Number of Weeks – 6           |   |   |   |   |   | Weeks – 3                 |   |   | Weeks – 3                |    |    | Weeks – 4                |    |    |  | Weeks – 6                                     |    |    |                  |    | Weeks – 4                          |    |                                 | Weeks – 3                         |                                       | Weeks – 3            |    |    |    |    |    |    |
|                    | Main Programs – 2Code         |   |   |   |   |   | Programs – Various        |   |   | Programs – 2Calculate    |    |    | Programs – 2Type         |    |    |  | Programs – 2Email,<br>2Connect, 2DIY          |    |    |                  |    | Programs – 2Question               |    |                                 | Programs – 2Simulate,<br>2Publish |                                       | Programs – 2Graph    |    |    |    |    |    |    |
|                    | See table below for breakdown |   |   |   |   |   |                           |   |   |                          |    |    |                          |    |    |  |   |    |    |                  |    |                                    |    |                                 |                                   |                                       |                      |    |    |    |    |    |    |
| 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 | 33 |
| YEAR 3 & 4 CYCLE B | Coding                        |   |   |   |   |   | Unit 4.2<br>Online safety |   |   | Unit 4.3<br>Spreadsheets |    |    |                          |    |    | Unit 4.4<br>Writing for different<br>audiences |   |    |    | Unit 4.5<br>Logo |    | Unit 4.6<br>Animation              |    | Unit 4.7<br>Effective<br>Search |                                   | Unit 4.8<br>Hardware<br>Investigators |                      |    |    |    |    |    |    |
|                    | Number of Weeks – 6           |   |   |   |   |   | Weeks – 4                 |   |   | Weeks – 6                |    |    |                          |    |    | Weeks – 5                                      |   |    |    | Weeks – 4        |    | Weeks – 3                          |    | Weeks – 3                       |                                   | Weeks – 2                             |                      |    |    |    |    |    |    |
|                    | Main Programs – 2Code         |   |   |   |   |   | Programs – Various        |   |   | Programs – 2Calculate    |    |    |                          |    |    | Programs – 2Email,<br>2Connect, 2DIY           |   |    |    | Programs – Logo  |    | Programs – 2Animate                |    | Programs – Browser              |                                   |                                       |                      |    |    |    |    |    |    |
|                    | See table below for breakdown |   |   |   |   |   |                           |   |   |                          |    |    |                          |    |    |  |   |    |    |                  |    |                                    |    |                                 |                                   |                                       |                      |    |    |    |    |    |    |

\* There is an optional unit 4.9 – Making Music that can be used in addition to the above units. It is a four week unit.

### Coding Breakdown

|                       |   |   |   |                               |  |  |
|-----------------------|---|---|---|-------------------------------|--|--|
| YEAR 3 & 4<br>CYCLE A | Review previous coding – Year 3, Lesson 1 | Simulating a physical system – Year 3, Lesson 2 | Making a timer – Year 4, Lesson 4       | Debugging – Year 3, Lesson 6  | Making a control simulation – Year 4, Lesson 5 | Decomposition and Abstraction – Year 4, Lesson 6 |
| YEAR 3 & 4<br>CYCLE B | Review previous coding, Y4, lesson 1      | Introducing ‘if’ statements – Year 3, Lesson 3  | ‘if/else’ statements – Year 4, Lesson 2 | Repetition – Year 3, Lesson 5 | Repeat until - Year 4, Lesson 3                | Variables – Year 3, Lesson 4                     |

| 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 5 & 6 CYCLE A*   | Unit 5.1<br>Coding  |   |   |   |   |                    | Unit 5.2<br>Online safety |   |                       | Unit 5.3<br>Spreadsheets |    |    |    |                                    | Unit 5.4<br>Databases |    |    |                            | Unit 5.5<br>Game Creator    |    |  | Unit 5.6<br>3D Modelling |    |                     | Unit 5.7<br>Concept Maps |    |    |    |    |    |    |    |
|                       | Number of Weeks – 6 |   |   |   |   |                    | Weeks – 3                 |   |                       | Weeks – 5                |    |    |    |                                    | Weeks – 4             |    |    |                            | Weeks – 5                   |    |  | Weeks – 4                |    |                     | Weeks – 4                |    |    |    |    |    |    |    |
| Main Programs – 2Code |                     |   |   |   |   | Programs - Various |                           |   | Programs – 2Calculate |                          |    |    |    | Programs – 2Question, 2Investigate |                       |    |    | Programs – 2DIY 3D         |                             |    | Programs – 2Design and Make                        |                          |    | Programs – 2Connect |                          |    |    |    |    |    |    |    |
| 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 & 6 CYCLE B*   | Unit 6.1<br>Coding  |   |   |   |   |                    | Unit 6.2<br>Online safety |   |                       | Unit 6.3<br>Spreadsheets |    |    |    |                                    | Unit 6.4<br>Blogging  |    |    |                            | Unit 6.5<br>Text Adventures |    |  | Unit 6.6<br>Networks     |    |                     | Unit 6.7<br>Quizzing     |    |    |    |    |    |    |    |
|                       | Number of Weeks – 6 |   |   |   |   |                    | Weeks – 3                 |   |                       | Weeks – 5                |    |    |    |                                    | Weeks – 5             |    |    |                            | Weeks – 5                   |    |  | Weeks – 3                |    |                     | Weeks – 6                |    |    |    |    |    |    |    |
| Main Programs – 2Code |                     |   |   |   |   | Programs - Various |                           |   | Programs – 2Calculate |                          |    |    |    | Programs – 2Blog                   |                       |    |    | Programs – 2Code, 2Connect |                             |    | Programs – 2Quiz, 2DIY, Text Toolkit, 2Investigate |                          |    |                     |                          |    |    |    |    |    |    |    |

\* There is an optional unit 6.8 – Understanding Binary that can be used in addition to the above units. It is a four week unit.

### Coding Breakdown

|                    |   |  |   |   |   |                                     |
|--------------------|---|--|---|---|---|-------------------------------------|
| YEAR 5 & 6 CYCLE A | Review Previous coding – Year 5 Lesson 1                              | Simulating a physical system – Year 5 Lesson 2 | Creating a game with a score and timer – Year 5 Lessons 4 and 5 |   | The Launch Command – Year 5 Lesson 6                  | Using User Input – Year 6, Lesson 4 |
| YEAR 5 & 6 CYCLE B | Designing and writing a more complex program – Year 6 Lessons 1 and 2 |  | Introducing text variables – Year 5 Lesson 3                    | Introducing Functions – Year 6 Lesson 3 | Flowcharts and control simulations – Year 6, Lesson 5 | Text Adventure – Year 6 Lesson 6    |