



## St Columb Major Academy - Computing Long Term Plan

|                    | Autumn 1                                                                           | Autumn 2                                                                        | Spring 1                                                              | Spring 2                                                          | Summer 1                                                  | Summer 2                                                                             |
|--------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------------------------------|
| EYFS/KS1<br>Year B | <u>Digital Literacy</u><br>Unit 1.1<br>Online Safety &<br>Exploring Purple Mash    | <u>Computer Science</u><br>Unit 1.4<br>Lego Builders                            | <u>Digital Literacy</u><br>Unit 2.5<br>Effective Searching            | <u>Information Technology</u><br>Unit 2.6<br>Creating Pictures    | <u>Computer Science</u><br>Unit 1.7<br>Coding             | <u>Computer Science</u><br>Unit 2.1<br>Coding                                        |
| EYFS/KS1<br>Year B | <u>Digital Literacy</u><br>Unit 1.1<br>Online Safety &<br>Exploring Purple Mash    | <u>Computer Science</u><br>Unit 1.5<br>Maze Explorers                           | <u>Digital Literacy</u><br>Unit 1.9<br>Technology Outside<br>School   | <u>Information Technology</u><br>Unit 2.4<br>Questioning          | <u>Information Technology</u><br>Unit 2.7<br>Making Music | <u>Information Technology</u><br>Unit 2.3<br>Spreadsheets                            |
| EYFS/KS1<br>Year C | <u>Digital Literacy</u><br>Unit 1.1<br>Online Safety &<br>Exploring Purple Mash    | <u>Computer Science</u><br>Unit 1.2<br>Grouping & Sorting                       | <u>Digital Literacy</u><br>Unit 2.2<br>Online Safety                  | <u>Information Technology</u><br>Unit 1.6<br>Animated Story Books | <u>Information Technology</u><br>Unit 1.3<br>Pictograms   | <u>Information Technology</u><br>Unit 2.8<br>Presenting Ideas                        |
| Y3/4<br>Year A     | <u>Information Technology</u><br>Unit 4.6<br>Animation                             | <u>Information Technology</u><br>Unit 4.4<br>Writing for Different<br>Audiences | <u>Digital Literacy</u><br>Unit 4.2<br>Online Safety                  | <u>Information Technology</u><br>Unit 4.7<br>Effective Search     | <u>Computer Science</u><br>Unit 4.5<br>Logo               | <u>Computer Science</u><br>Unit 3.1/4.1<br>Coding<br><i>See separate breakdown</i>   |
| Y3/4<br>Year B     | <u>Computer Science</u><br>Unit 3.1/4.1<br>Coding<br><i>See separate breakdown</i> | <u>Information Technology</u><br>Unit 3.3<br>Spreadsheet                        | <u>Digital Literacy</u><br>Unit 3.2<br>Online Safety                  | <u>Digital Literacy</u><br>Unit 3.5<br>Email                      | <u>Computer Science</u><br>Unit 3.10<br>Micro:bits        | <u>Information Technology</u><br>Unit 3.6 & 3.8<br>Branching Databases<br>& Graphing |
| Y5/6<br>Year A     | <u>Computer Science</u><br>Unit 5.1/6.1<br>Coding<br><i>See separate breakdown</i> | <u>Computer Science</u><br>Unit 5.9<br>Using External Devices                   | <u>Digital Literacy</u><br>Unit 6.2 & 6.4<br>Online Safety & Blogging | <u>Computer Science</u><br>Unit 6.5<br>Text Adventures            | <u>Computer Science</u><br>Unit 6.6<br>Networks           | <u>Information Technology</u><br>Unit 6.7<br>Quizzing                                |
| Y5/6<br>Year B     | <u>Computer Science</u><br>Unit 5.1/6.1<br>Coding<br><i>See separate breakdown</i> | <u>Information Technology</u><br>Unit 5.6<br>3D Modelling                       | <u>Information Technology</u><br>Unit 5.4<br>Databases                | <u>Digital Literacy</u><br>Unit 5.2<br>Online Safety              | <u>Computer Science</u><br>Unit 5.5<br>Concept Maps       | <u>Computer Science</u><br>Unit 5.5<br>Game Creator                                  |

Digital Literacy

Computer Science

Information Technology

**Coding Breakdown**

| YEAR 3 & 4 - CYCLE A                      |                                                                |                                           |                                                              |                                           |                                                       |
|-------------------------------------------|----------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------|
| Using Flowcharts<br>Unit 3.1,<br>Lesson 1 | Using Timers<br>Unit 3.1,<br>Lesson 2                          | 'if' statements<br>Unit 4.1,<br>Lesson 2  | Coordinates<br>Unit 4.1,<br>Lesson 3                         | Code, Test and Debug – Unit 3.1, Lesson 4 | Design, Code, Test and Debug<br>Unit 4.1,<br>Lesson 1 |
| YEAR 3 & 4 - CYCLE B                      |                                                                |                                           |                                                              |                                           |                                                       |
| Using Repeat<br>Unit 3.1,<br>Lesson 3     | Repeat Until and 'if/else' Statements<br>Unit 4.1,<br>Lesson 4 | Number Variables<br>Unit 4.1,<br>Lesson 5 | Design and Make an Interactive scene<br>Unit 3.1, Lesson 5-6 |                                           | Making a Playable game – Unit 4.1, Lesson 6           |

**Coding Breakdown**

| YEAR 5 & 6 - CYCLE A                                                    |                                                       |                                                        |                                              |                                                             |                                         |
|-------------------------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------|-----------------------------------------|
| Coding Efficiently<br>Unit 5.1,<br>Lesson 1                             | Simulating a physical system<br>Unit 5.1,<br>Lesson 2 | Friction and Functions<br>Unit 5.1,<br>Lesson 4        | Introducing Strings<br>Unit 5.1,<br>Lesson 5 | Text Variable and Concatenation<br>Unit 5.1,<br>Lesson 6    | User Input<br>Unit 6.1,<br>Lesson 5     |
| YEAR 5 & 6 - CYCLE B                                                    |                                                       |                                                        |                                              |                                                             |                                         |
| Designing and writing a more complex program<br>Unit 6.1, Lessons 1 & 2 |                                                       | Decomposition and Abstraction<br>Unit 5.1,<br>Lesson 3 | Using Functions<br>Unit 6.1,<br>Lesson 3     | Flowcharts and control simulations<br>Unit 6.1,<br>Lesson 4 | Text Adventure<br>Unit 6.1,<br>Lesson 6 |