

Unit 3.1 – Coding

Lesson	Title	Aims (Objectives)	Success Criteria
1	Using Flowcharts	<ul style="list-style-type: none"> <li>To review previous coding knowledge.</li> <li>To understand what a flowchart is and how flowcharts are used in computer programming.</li> </ul>	<ul style="list-style-type: none"> <li>Children can read and explain a flowchart.</li> <li>Children can use a flowchart to create a computer program.</li> <li>Children can create a computer program that uses click events and timers.</li> </ul>
2	Using Timers	<ul style="list-style-type: none"> <li>To understand that there are different types of timers.</li> <li>To be able to select the right type of timer for a purpose.</li> </ul>	<ul style="list-style-type: none"> <li>Children can create a program that uses a timer-after command</li> <li>Children can create a program that uses a timer-every command</li> <li>Children understand there can be different ways to solve a problem.</li> </ul>
3	Using Repeat	<ul style="list-style-type: none"> <li>To understand how to use the repeat command.</li> </ul>	<ul style="list-style-type: none"> <li>Children understand how the turtle object moves</li> <li>Children can use the repeat command with an object.</li> <li>Children can create a computer program that includes use of the repeat command.</li> </ul>
4	Code, Test and Debug	<ul style="list-style-type: none"> <li>To use coding knowledge to create a range of programs.</li> <li>To understand the importance of nesting.</li> </ul>	<ul style="list-style-type: none"> <li>Children can create computer programs using prior knowledge.</li> <li>Children can run, test and debug their programs.</li> <li>Children can consider nesting when debugging their programs.</li> </ul>
5 & 6	Design and Make an Interactive Scene	<ul style="list-style-type: none"> <li>To design and create an interactive scene.</li> </ul>	<ul style="list-style-type: none"> <li>Children can use the properties table to set the properties of objects.</li> <li>Children can plan their scene and code before they create their program.</li> <li>Children can confidently make several different things happen in a program.</li> </ul>

## Unit 3.2 – Online Safety

Lesson	Title	Aims (Objectives)	Success Criteria
1	Safety in Numbers	<ul style="list-style-type: none"> <li>To know what makes a safe password, how to keep passwords safe and the consequences of giving your passwords away.</li> <li>To understand how the Internet can be used to help us to communicate effectively.</li> <li>To understand how a blog can be used to help us communicate with a wider audience.</li> </ul>	<ul style="list-style-type: none"> <li>Children understand what makes a good password for use on the Internet. Children are beginning to realise the outcomes of not keeping passwords safe.</li> <li>Children can contribute to a concept map of all the different ways they know that the Internet can help us to communicate.</li> <li>Children have contributed to a class blog with clear and appropriate messages.</li> <li>Extension: Children understand that passwords help to limit who can see personal / private / confidential information.</li> </ul>
2	Fact or Fiction?	<ul style="list-style-type: none"> <li>To consider if what can be read on websites is always true.</li> <li>To look at a 'spoof' website.</li> <li>To create a 'spoof' webpage.</li> <li>To think about why these sites might exist and how to check that the information is accurate.</li> </ul>	<ul style="list-style-type: none"> <li>Children understand that some information held on websites may not be accurate or true.</li> <li>Children are beginning to understand how to search the Internet and how to think critically about the results that are returned.</li> <li>Children have accessed and assessed a 'spoof' website.</li> <li>Children have created their own 'spoof' webpage mock-up.</li> <li>Children have shared their 'spoof' web page on a class display board.</li> <li>Extension: Children evaluate facts from a website and explain how they fact checked the information that was presented.</li> </ul>
3	Appropriate Content & Ratings	<ul style="list-style-type: none"> <li>To learn about the meaning of age restrictions symbols on digital media and devices.</li> <li>To discuss why PEGI restrictions exist.</li> <li>To know where to turn for help if they see inappropriate content or have inappropriate contact from others.</li> </ul>	<ul style="list-style-type: none"> <li>Children can identify some physical and emotional effects of playing/watching inappropriate content/games.</li> <li>Children relate cyberbullying to bullying in the real-world and have strategies for dealing with online bullying including screenshot and reporting.</li> </ul>

### Unit 3.3 – Spreadsheets

Lesson	Title	Aims (Objectives)	Success Criteria
1	Creating Pie Charts and Bar Graphs	<ul style="list-style-type: none"> <li>To add and edit data in a table layout.</li> <li>To find out how spreadsheet programs can automatically create graphs from data.</li> </ul>	<ul style="list-style-type: none"> <li>Children can create a table of data on a spreadsheet.</li> <li>Children can use a spreadsheet program to automatically create charts and graphs from data.</li> </ul>
2	Using more than and Spin Button Tools	<ul style="list-style-type: none"> <li>To introduce the 'more than', 'less than' and 'equals' tools.</li> <li>To introduce the 'spin' tool and show how it can be used to count through times tables.</li> </ul>	<ul style="list-style-type: none"> <li>Children can use the 'more than', 'less than' and 'equals' tools to compare different numbers and help to work out solutions to calculations.</li> <li>Children can use the 'spin' tool to count through times tables.</li> </ul>
3	Advanced Mode and Cell Addresses	<ul style="list-style-type: none"> <li>To introduce the Advanced mode of 2Calculate.</li> <li>To learn about describing cells using their addresses.</li> </ul>	<ul style="list-style-type: none"> <li>Children can describe a cell location in a spreadsheet using the notation of a letter for the column followed by a number for the row.</li> <li>Children can find specified locations in a spreadsheet.</li> </ul>

### Unit 3.5 – Email

Lesson	Title	Aims (Objectives)	Success Criteria
1	Communication	<ul style="list-style-type: none"> <li>To think about the different methods of communication.</li> </ul>	<ul style="list-style-type: none"> <li>Children can list a range of different ways to communicate.</li> <li>Children can use 2Connect to highlight the strengths and weaknesses of each method.</li> <li>Extension: Children can order the various types of communication that have been used through history.</li> </ul>
2	Composing Emails	<ul style="list-style-type: none"> <li>To open and respond to an email.</li> <li>To write an email to someone from an address book.</li> </ul>	<ul style="list-style-type: none"> <li>Children can open an email and respond to it.</li> <li>Children have sent emails to other children in the class.</li> <li>Extension: Children can use the search option in the address book to find a classmate when sending an email.</li> </ul>
3	Using Email Safely: Part 1	<ul style="list-style-type: none"> <li>To learn how to use email safely.</li> </ul>	<ul style="list-style-type: none"> <li>Children have written rules about how to stay safe using email.</li> <li>Children have contributed to classmates' rules.</li> <li>Extension: Children understand the importance of draft.</li> </ul>
4	Using Email Safely: Part 2	<ul style="list-style-type: none"> <li>To learn how to use email safely.</li> </ul>	<ul style="list-style-type: none"> <li>Children have created a quiz about email safety which explores scenarios that they could come across in the future.</li> </ul>

			<ul style="list-style-type: none"> <li>• Extension: Children create title screens for their quizzes explaining what the quiz is about, and how to play it.</li> </ul>
5	Attachments	<ul style="list-style-type: none"> <li>• To add an attachment to an email.</li> </ul>	<ul style="list-style-type: none"> <li>• Children can attach work to an email.</li> <li>• Children know what CC means and how to use it.</li> </ul>
6	Email Simulations	<ul style="list-style-type: none"> <li>• To explore a simulated email scenario.</li> </ul>	<ul style="list-style-type: none"> <li>• Children can read and respond to a series of email communications.</li> <li>• Children can attach files appropriately and use email communication to explore ideas.</li> <li>• Extension: Children know why the terms CC and BCC are used</li> <li>• Children understand when to use CC or BCC</li> </ul>

### Unit 3.6 – Branching Databases

Lesson	Title	Aims (Objectives)	Success Criteria
1	Introducing Databases	<ul style="list-style-type: none"> <li>• To sort objects using just YES/NO questions.</li> </ul>	<ul style="list-style-type: none"> <li>• Children understand how YES/NO questions are structured and answered.</li> <li>• Children have used YES/NO questioning to play a simple game with a friend.</li> <li>• Children can explain why they choose a particular question to split their database.</li> <li>• Extension: Children can begin to use 'or more' and 'or less' in their questioning</li> </ul>
2	Branching Databases	<ul style="list-style-type: none"> <li>• To complete a branching database using 2Question.</li> </ul>	<ul style="list-style-type: none"> <li>• Children have contributed to a class branching database about fruit.</li> <li>• Children have completed a branching database about vegetables.</li> <li>• Extension: Children can edit and adapt a branching database to accommodate new entries.</li> </ul>
3 and 4	Creating a branching database on the computer	<ul style="list-style-type: none"> <li>• To create a branching database of the children's choice.</li> </ul>	<ul style="list-style-type: none"> <li>• Children can choose a suitable topic for a branching database.</li> <li>• Children can select and save appropriate images.</li> <li>• Children can create a branching database.</li> <li>• Children know how to use and debug their own and others branching databases.</li> </ul>

### Unit 3.8 – Graphing

Lesson	Title	Aims (Objectives)	Success Criteria
1	Introducing 2Graph	<ul style="list-style-type: none"> <li>To enter data into a graph and answer questions.</li> </ul>	<ul style="list-style-type: none"> <li>Children can set up a graph with a given number of fields.</li> <li>Children can enter data for a graph.</li> <li>Children can produce and share graphs made on the computer.</li> <li>Extension: Children can select most appropriate style of graph for their data and explain their reasoning.</li> </ul>
2	Using 2Graph to Solve an Investigation	<ul style="list-style-type: none"> <li>To solve an investigation and present the results in graphic form.</li> </ul>	<ul style="list-style-type: none"> <li>Children have solved a maths investigation.</li> <li>Children can present the results in a range of graphical formats.</li> <li>Children can use the sorting option to make analysis of their data easier.</li> <li>Extension: Children can select most appropriate style of graph for their data and explain their reasoning.</li> </ul>

### Unit 3.9 – Presenting (with Microsoft PowerPoint)

Lesson	Title	Aims (Objectives)	Success Criteria
1	Making a Presentation from a Blank Page	<ul style="list-style-type: none"> <li>To create a page in a presentation.</li> </ul>	<ul style="list-style-type: none"> <li>Children know what PowerPoint is.</li> <li>Children can open PowerPoint.</li> <li>Children can add text to a page and format it.</li> <li>Children can add shapes to a page.</li> </ul>
2	Adding Media	<ul style="list-style-type: none"> <li>To add media to a presentation</li> </ul>	<ul style="list-style-type: none"> <li>Children can change the design of the slides.</li> <li>Children can insert a new slide.</li> <li>Children can insert pictures.</li> <li>Children can edit pictures.</li> <li>Children can insert video and audio.</li> </ul>
3	Adding Animation	<ul style="list-style-type: none"> <li>To add animations into a presentation</li> </ul>	<ul style="list-style-type: none"> <li>Children can use animations in a presentation.</li> <li>Children can use transitions in a presentation.</li> </ul>

4	Presenting with Timings	<ul style="list-style-type: none"> <li>To add timings into a presentation.</li> </ul>	<ul style="list-style-type: none"> <li>Children can add timings to a presentation</li> <li>Children can present effectively using PowerPoint</li> </ul>
5 &6	Create a Presentation	<ul style="list-style-type: none"> <li>To use the skills learnt in previous weeks to design and present an effective presentation.</li> </ul>	<ul style="list-style-type: none"> <li>Children can create a presentation including formatted text.</li> <li>Children can include different media.</li> <li>Children can add transitions and animations.</li> <li>Children can add timings to the presentation.</li> <li>Children can present effectively.</li> </ul>