

Unit 4.1 – Coding

Lesson	Title	Aims (Objectives)	Success Criteria
1	Design, Code, Test and Debug	<ul style="list-style-type: none"> To review coding vocabulary and knowledge. To create a simple computer program. 	<ul style="list-style-type: none"> Children can explore different object types in 2Code. Children can use a background and objects to create a scene. Children can plan an algorithm for their scene and use 2Code to program it.
2	IF Statements	<ul style="list-style-type: none"> To begin to understand selection in computer programming. To understand how an IF statement works. 	<ul style="list-style-type: none"> Children can create a program that includes an IF statement. Children can interpret a flowchart that depicts an IF statement.
3	Co-ordinates	<ul style="list-style-type: none"> To understand how to use co-ordinates in computer programming. To understand how an IF statement works. 	<ul style="list-style-type: none"> Children can make use of the X and Y properties of objects in their coding. Children can create a program that includes an IF statement.
4	Repeat Until and IF/ELSE Statements	<ul style="list-style-type: none"> To understand the Repeat until command. To begin to understand selection in computer programming. To understand how an IF/ELSE statement works. 	<ul style="list-style-type: none"> Children can read code that includes repeat until and IF/ ELSE and explain how it works. Children can create a program that includes an IF/ ELSE statement. Children can interpret a flowchart that depicts an IF/ ELSE statement.
5	Number Variables	<ul style="list-style-type: none"> To understand what a variable is in programming. To use a number variable. 	<ul style="list-style-type: none"> Children can explain what a variable is in programming. Children can create and use variables when programming.
6	Making a Playable Game	<ul style="list-style-type: none"> To review vocabulary and concepts learnt in Year 4 Coding. To create a playable game. 	<ul style="list-style-type: none"> Children can read code that includes repeat until and IF/ ELSE and explain how it works. Children can create a program that includes and IF/ ELSE statement. Children can interpret a flowchart that depicts an IF/ ELSE statement.

Unit 4.2 – Online Safety

Lesson	Title	Aims (Objectives)	Success Criteria
1	Going Phishing	<ul style="list-style-type: none"> To understand how children can protect themselves from online identity theft. To understand that information put online leaves a digital footprint or trail and that this can aid identity theft. 	<ul style="list-style-type: none"> Children know that security symbols such as a padlock protect their identity online. Children know the meaning of the term 'phishing' and are aware of the existence of scam websites. Children can explain what a digital footprint is and how it relates to identity theft. Children can give examples of things that they would not want to be in their digital footprint.
2	Beware Malware	<ul style="list-style-type: none"> To identify the risks and benefits of installing software including apps. 	<ul style="list-style-type: none"> Children can identify possible risks of installing free and paid for software. Children know that malware is software that is specifically designed to disrupt, damage, or gain access to a computer. Children know what a computer virus is.
3	Plagiarism	<ul style="list-style-type: none"> To understand that copying the work of others and presenting it as their own is called 'plagiarism' and to consider the consequences of plagiarism. To identify appropriate behaviour when participating or contributing to collaborative online projects for learning. 	<ul style="list-style-type: none"> Children can determine whether activities that they undertake online, infringe another's' copyright. They know the difference between researching and using information and copying it Children know about citing sources that they have used.
4	Healthy Screen-Time	<ul style="list-style-type: none"> To identify the positive and negative influences of technology on health and the environment. To understand the importance of balancing game and screen time with other parts of their lives. 	<ul style="list-style-type: none"> Children can take more informed ownership of the way that they choose to use their free time. They recognise a need to find a balance between being active and digital activities. Children can give reasons for limiting screen time.

Unit 4.3 – Spreadsheets

Lesson	Title	Aims (Objectives)	Success Criteria
1	Formula Wizard and Formatting Cells	<ul style="list-style-type: none"> To explore how the numbers entered into cells can be set to either currency or decimal. To explore the use of the display of decimal places. To find out how to add formulae to a cell. 	<ul style="list-style-type: none"> Children can use the number formatting tools within 2Calculate to appropriately format numbers. Children can add a formula to a cell to automatically make a calculation in that cell.
2	Using the Timer and Spin Buttons	<ul style="list-style-type: none"> To explore how tools can be combined to use 2Calculate to make number games. To explore the use of the timer, random number and spin button tools. 	<ul style="list-style-type: none"> Children can use the timer, random number and spin button tools. Children can combine tools to make fun ways to explore number.
3	Line Graphs	<ul style="list-style-type: none"> To use the line graphing tool in 2Calculate with appropriate data. To interpret a line graph to estimate values between data readings. 	<ul style="list-style-type: none"> Children can use a series of data in a spreadsheet to create a line graph. Children can use a line graph to find out when the temperature in the playground will reach 20°C.
4	Using a Spreadsheet for Budgeting	<ul style="list-style-type: none"> To use the currency formatting tool in 2Calculate. To use 2Calculate to create a model of a real-life situation. 	<ul style="list-style-type: none"> Children can make practical use of a spreadsheet to help them plan actions. Children can use the currency formatting in 2Calculate.
5	Exploring Place Value with a Spreadsheet	<ul style="list-style-type: none"> To use the functions of allocating value to images in 2Calculate to make a resource to teach place value. 	<ul style="list-style-type: none"> Children can allocate values to images and use these to explore place value. Children can use a spreadsheet made in 2Calculate to check their understanding of a mathematical concept.

Unit 4.5 – Logo

Lesson	Title	Aims (Objectives)	Success Criteria
1	Introduction to 2Logo	<ul style="list-style-type: none"> To learn the structure of the language of 2Logo. To input simple instructions in 2Logo 	<ul style="list-style-type: none"> Children know what the common instructions are in 2Logo and how to type them. Children can follow simple 2Logo instructions to create shapes on paper. Children can follow simple instructions to create shapes in 2Logo.
2	Creating Letters using 2Logo	<ul style="list-style-type: none"> To use 2Logo to create letter shapes. 	<ul style="list-style-type: none"> Children can create 2Logo instructions to draw patterns of increasing complexity. Children understand the pu and pd commands. Children can write 2Logo instructions for a word of four letters.
3	Using the 'Repeat' Command in 2Logo	<ul style="list-style-type: none"> To use the Repeat command in 2Logo to create shapes. 	<ul style="list-style-type: none"> Children can follow 2Logo code to predict the outcome. Children can create shapes using the Repeat command. Children can find the most efficient way to draw shapes.
4	Using Procedures	<ul style="list-style-type: none"> To use and build procedures in 2Logo. 	<ul style="list-style-type: none"> Children can use the Procedure feature. Children can create 'flowers' or 'crystals' using 2Logo.

Unit 4.6 – Animation

Lesson	Title	Aims (Objectives)	Success Criteria
1	Animating an Object	<ul style="list-style-type: none"> To decide what makes a good, animated film or cartoon and discuss favourite animations. To learn how animations are created by hand. To find out how 2Animate animations can be created in a similar way using technology. 	<ul style="list-style-type: none"> Children have put together a simple animation using paper to create a flick book. Children understand animation frames. Children have made a simple animation using 2Animate.
2	2Animate Tools	<ul style="list-style-type: none"> To learn about onion skinning in animation. To add backgrounds and sounds to animations. 	<ul style="list-style-type: none"> Children know what the Onion Skin tool does in animation. Children can use the Onion Skin tool to create an animated image. Children can use backgrounds and sounds to make more complex and imaginative animations.
3	Stop Motion Animation	<ul style="list-style-type: none"> Introducing 'stop motion' animation. 	<ul style="list-style-type: none"> Children know what 'stop motion' animation is and how it is created.

		<ul style="list-style-type: none"> To share animation the class blog. 	<ul style="list-style-type: none"> Children have used ideas from existing 'stop motion' films to recreate their own animation. Children have shared their animations and commented on each other's work using display boards and blogs in Purple Mash.
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Unit 4.7 – Effective Searching

Lesson	Title	Aims (Objectives)	Success Criteria
1	Using a Search Engine	<ul style="list-style-type: none"> To locate information on the search results page. 	<ul style="list-style-type: none"> Children can structure search queries to locate specific information
2	Use Search Effectively to Answer Questions	<ul style="list-style-type: none"> To use search effectively to find out information. 	<ul style="list-style-type: none"> Children have used search to answer a series of questions. Children have written search questions for a friend to solve.
3	Reliable Information Sources	<ul style="list-style-type: none"> To assess whether an information source is true and reliable. 	<ul style="list-style-type: none"> Children can analyse the contents of a web page for clues about the credibility of the information.

Unit 4.8 – Hardware Investigators

Lesson	Title	Aims (Objectives)	Success Criteria
1	Hardware	<ul style="list-style-type: none"> To understand the different parts that make up a desktop computer. 	<ul style="list-style-type: none"> Children can name the different parts of a desktop computer. Children know what the function of the different parts of a computer is.
2	Parts of a computer	<ul style="list-style-type: none"> To recall the different parts that make up a computer 	<ul style="list-style-type: none"> Children have created a leaflet to show the function of computer parts.