

Unit 6.1 – Coding

Lesson	Title	Aims (Objectives)	Success Criteria
1 & 2	Designing and Making a more Complex Program	<ul style="list-style-type: none"> To design a playable game with a timer and a score. To plan and use selection and variables. To understand how the launch command works. 	<ul style="list-style-type: none"> Children can plan a program which includes a timer and a score. Children can follow their plans to create a program. Children can debug when things do not run as expected.
3	Using Functions	<ul style="list-style-type: none"> To use functions and understand why they are useful. To understand how functions are created and called. 	<ul style="list-style-type: none"> Children can create a program that makes use of functions. Children can create a program that uses multiple functions with the code arranged in tabs. Children can explain how their code executes when their program is run.
4	Flowcharts and Control Simulations	<ul style="list-style-type: none"> To use flowcharts to test and debug a program. To create a simulation of a room in which devices can be controlled. 	<ul style="list-style-type: none"> Children can follow flowcharts to create and debug code. Children can create flowcharts for procedures. Children can be creative with the way they code to generate novel visual effects.
5	User Input	<ul style="list-style-type: none"> To understand the different options of generating user input in 2Code. To understand how user input can be used in a program. 	<ul style="list-style-type: none"> Children can code programs that take text input from the user and use this in the program. Children can attribute variables to user input. Children are aware of the need to code for all possibilities when using user input.
6	Using Text-based Adventures	<ul style="list-style-type: none"> To understand how 2Code can be used to make a text-based adventure game. 	<ul style="list-style-type: none"> Children can follow through the code of how a text adventure can be programmed in 2Code. Children can design their own text-based adventure game based on one they have played. Children can adapt an existing text adventure so it reflects their own ideas.

Unit 6.2 – Online Safety

Lesson	Title	Aims (Objectives)	Success Criteria
1	Message in a Game	<ul style="list-style-type: none"> To identify benefits and risks of mobile devices broadcasting the location of the user/device, e.g., apps accessing location. To identify secure sites by looking for privacy seals of approval, e.g., https, padlock icon. To identify the benefits and risks of giving personal information and device access to different software. 	<ul style="list-style-type: none"> Children have used the example game and further research to refresh their memories about risks online including sharing location, secure websites, spoof websites, phishing, and other email scams. Children have used the example game and further research to refresh their memories about the steps they can take to protect themselves including protecting their digital footprint, where to go for help, smart rules and security software.
2	Online Behaviour	<ul style="list-style-type: none"> To review the meaning of a digital footprint and understand how and why people use their information and online presence to create a virtual image of themselves as a user. To have a clear idea of appropriate online behaviour and how this can protect themselves and others from possible online dangers, bullying and inappropriate behaviour. To begin to understand how information online can persist and give away details of those who share or modify it. 	<ul style="list-style-type: none"> Children understand how what they share impacts upon themselves and upon others in the long-term. Children know about the consequences of promoting inappropriate content online and how to put a stop to such behaviour when they experience it or witness it as a bystander. Extension: Children' actions demonstrate that they also feel a responsibility to others when communicating and sharing content online.
3	Screen Time	<ul style="list-style-type: none"> To understand the importance of balancing game and screen time with other parts of their lives, e.g., explore the reasons why they may be tempted to spend more time playing games or find it difficult to stop playing and the effect this has on their health. To identify the positive and negative influences of technology on health and the environment. 	<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. Children can talk about the positives and negative aspects of technology and balance these opposing views. Extension: Children have an internalised in-depth understanding of the risks and benefits of an online presence.

Unit 6.4 – Blogging

Lesson	Title	Aims (Objectives)	Success Criteria
1	What is a Blog?	<ul style="list-style-type: none"> To identify the purpose of writing a blog. To identify the features of successful blog writing. 	<ul style="list-style-type: none"> Children understand how a blog can be used as an informative text. Children understand the key features of a blog.
2	Planning a blog	<ul style="list-style-type: none"> To plan the theme and content for a blog. 	<ul style="list-style-type: none"> Children can work collaboratively to plan a blog.
3	Writing a Blog	<ul style="list-style-type: none"> To understand how to write a blog and a blog post. To consider the effect upon the audience of changing the visual properties of the blog. To understand how to contribute to an existing blog. 	<ul style="list-style-type: none"> Children can create a blog or blog post with a specific purpose. Children understand that the way in which information is presented has an impact upon the audience.
4	Sharing Posts and Commenting	<ul style="list-style-type: none"> To understand the importance of commenting on blogs. To peer-assess blogs against the agreed success criteria. To understand how and why blog posts and comments are approved by the teacher. 	<ul style="list-style-type: none"> Children can post comments and blog posts to an existing class blog. Children understand the approval process that their posts go through and demonstrate an awareness of the issues surrounding inappropriate posts and cyberbullying. Children can assess the effectiveness and impact of a blog. Children understand that content included in their blog carefully considers the end user.

Unit 6.6 – Networks

Lesson	Title	Aims (Objectives)	Success Criteria
1	The World Wide Web and the Internet	<ul style="list-style-type: none"> To discover what the children know about the Internet. 	<ul style="list-style-type: none"> Children know the difference between the World Wide Web and the internet. Extension: Children can provide examples of the difference between the World Wide Web and the Internet.
2	Our School Network and Accessing the Internet	<ul style="list-style-type: none"> To find out what a LAN and WAN are. To find out how we access the internet in school. 	<ul style="list-style-type: none"> Children know about their school network. Extension: Children can explain the differences between more than two network types such as: LAN, WAN, WLAN and SAN.
3	Research	<ul style="list-style-type: none"> To research and find out about the age of the internet. To think about what the future might hold. 	<ul style="list-style-type: none"> Children have researched and found out about Tim Berners-Lee. Children have considered some of the major changes in technology which have taken place during their lifetime and the lifetime of their teacher/another adult.

Unit 6.9 – Spreadsheets (with Microsoft Excel)

Lesson	Title	Aims (Objectives)	Success Criteria
1	What is a Spreadsheet?	<ul style="list-style-type: none"> To know what a spreadsheet looks like. To navigate and enter data into cells. 	<ul style="list-style-type: none"> Children know some uses of a spreadsheet tool. Children can navigate around a spreadsheet using cell references. Children can enter data into cells. Children understand new vocabulary relating to spreadsheets: cells, columns, rows, cell names, sheets, workbook.
2	Basic Calculations	<ul style="list-style-type: none"> To introduce some basic data formulae in Excel. To demonstrate how the use of Excel can save time and effort when performing calculations. 	<ul style="list-style-type: none"> Children can use a spreadsheet to carry out basic calculations including addition, subtraction, multiplication and division formulae. Children can use the series fill function. Children recognise how using formulae allows the data to change and the calculations to update automatically.
3	Modelling	<ul style="list-style-type: none"> To use a spreadsheet to model a situation. 	<ul style="list-style-type: none"> Children can use a spreadsheet to model a situation. Children can use a spreadsheet to solve a problem. Children can use the SUM function
4	Organising Data	<ul style="list-style-type: none"> To demonstrate how Excel can make complex data clear by manipulating the way it is presented. 	<ul style="list-style-type: none"> Children can use a variety of methods including flash fill, convert text to tables and splitting cells for organising and presenting their data in a spreadsheet. Children know what is meant by a delimiter. Children understand how to sort data.
5	Advanced Formulae and Big Data	<ul style="list-style-type: none"> To use formulae for percentages, averages, max and min in spreadsheets. 	<ul style="list-style-type: none"> Children know how to incorporate formulae for percentages, averages, max and min into their spreadsheets. Children gain familiarity with range notation. Children know some shortcuts that help to make data meaningful. Children begin to develop a critical eye when it comes to the conclusions that can be made from data.
6	Charts and Graphics	<ul style="list-style-type: none"> To create a variety of graphs in Excel. 	<ul style="list-style-type: none"> Children know that there are ways to represent their data graphically and that spreadsheets can make the process of representing data easier. Children gain an understanding of how a graphical representation can make data easier to interpret. Children make a variety of charts using Sheets.

			Children illustrate their data using sparklines and data bars.
7	Using a Spreadsheet to Plan a Cake Sale	<ul style="list-style-type: none"> • To use a spreadsheet to model a real-life situation. 	<ul style="list-style-type: none"> • Children can understand how a spreadsheet can be used to plan an event. • Children understand the advantages of using formulae when data is subject to change. • Children have modelled a real-life situation using a spreadsheet.
8	Using a Spreadsheet to Solve Problems	<ul style="list-style-type: none"> • To apply spreadsheet skills to solving problems. 	<ul style="list-style-type: none"> • To apply all new spreadsheet skills to solving problems and presenting data. • To explore printing spreadsheets.