



## Year 6 Autumn term — Computing 6:1 Coding

Our Key Learning Objectives			
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.			
To use functions and understand why they are useful.			
To understand how functions are created and called.			
To use flowcharts to create and debug code.			
To create simulation of a room in which devices can be controlled.			
To understand how user input can be used in a program.			
To understand how 2Code can be used to make a text adventure game.			

Tick the **green** box if you fully understand and can explain your knowledge to someone else. Tick the **orange** box if you understand a bit but would need some help to explain it to someone else. Tick the **red** box if you are still learning to understand.

### Key Words

<u>Procedure</u>	<u>Launch command</u>	<u>Concatenation</u>	<u>Function</u>
<u>Event</u>	<u>Simulation</u>	<u>Variable</u>	<u>User input</u>

Write down any questions you would like to explore further.

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## Beacon 3

- Understand the value of computer networks but also be aware of the main dangers.
- Recognise what personal information is and explain how this can be kept safe.
- Have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of different technologies and online services.
- Implicitly relate appropriate online behaviour to their right to personal privacy and mental well-being of themselves and others.
- *Children know what a WAN and LAN are and can describe how they access the internet in school.*
- Explain how credible a webpage is and the information it contains.
- Translate algorithms that include sequence, selection, and repetition into code with increasing ease.
- Combine sequence, selection and repetition with other coding structures to achieve their algorithm design.
- Search with greater complexity for digital content when using a search engine
- Use several different ways of sharing digital content.
- *Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a problem.*
- *design and create their own blogs to become a content creator on the internet*



## Year 6 Autumn term — Computing 6:2 Online Safety

Our Key Learning Objectives			
To identify benefits and risks of mobile devices broadcasting the location of the user/device.			
To identify secure sites by looking for privacy seals of approval.			
To identify the benefits and risks of giving personal information.			
To review the meaning of digital footprint.			
To have a clear idea of appropriate online behaviour.			
To begin to understand how information online can persist.			
To understand the importance of balancing screen and game time with other parts of their lives.			
To identify positive and negative influences of technology on health and the environment.			

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### Key Words

<u>Screen time</u>	<u>Digital footprint</u>	<u>Password</u>
<u>PEGI rating</u>	<u>Phishing</u>	<u>Spoof website</u>

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## Year 6 Autumn term — Computing 6:4 Blogging

Our Key Learning Objectives			
To identify the purpose of writing a blog.			
To identify the features of a successful blog.			
To plan the theme and content for a blog.			
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.			
To understand how and why blog posts are approved by the teacher.			
To understand the importance of commenting on blogs.			

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### Key Words

<u>Audience</u>	<u>Blog page</u>	<u>Collaborative</u>
<u>Blog</u>	<u>Blog post</u>	<u>Icon</u>

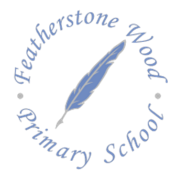
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## Year 6 Spring term — Computing 6:5 Coding

Our Key Learning Objectives			
To find out what a text adventure is.			
To use 2Connect to plan a story adventure.			
To make a story based adventure using 2Create a Story.			
To introduce an alternative model for a text adventure which has a less sequential narrative.			
To use written plans to code a map based adventure in 2Code.			

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### Key Words

<u>Text based adventure</u>	<u>Concept map</u>	<u>Debug</u>
<u>Sprite</u>	<u>Function</u>	

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## Year 6 Spring term — Computing 6:7 Quizzing

Our Key Learning Objectives			
To create a picture based quiz for young children.			
To learn how to use the question types within 2Quiz.			
To explore the grammar quizzes.			
To make a quiz that requires the player to search a database.			
To make a quiz to test your teachers or parents.			

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### Key Words

<u>Audience</u>	<u>Collaboration</u>	<u>Concept map</u>
<u>Database</u>	<u>Quiz</u>	

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## Year 6 Summer term – Computing 6:6 Networks

Our Key Learning Objectives			
To learn about what the internet consists of.			
To find out what a LAN and WAN are.			
To find out how the internet is accessed in school.			
To research and find out about the age of the internet.			
To think about what the future might hold.			

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### Key Words

<u>Internet</u>	<u>World Wide web</u>	<u>Router</u>	<u>LAN</u>
<u>WAN</u>	<u>Network cables</u>	<u>Wireless</u>	

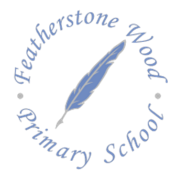
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## Year 6 Summer term — Computing 6:3 Spreadsheets

Our Key Learning Objectives			
To use a spreadsheet to investigate the probability of the results of throwing many dice.			
To use a spreadsheet to calculate the discount and final prices in a sale.			
To use a spreadsheet to plan how to spend pocket money and the effect of saving.			
To use a spreadsheet to plan a school charity day to maximise the money donated to charity.			

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### Key Words

<u>Average</u>	<u>Columns</u>	<u>Count tool</u>	<u>Advance mode</u>
<u>Cells</u>	<u>Copy and paste</u>	<u>Charts</u>	<u>Dice</u>

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## Year 6 Summer term — Computing 6:8 Understanding Binary

Our Key Learning Objectives			
To examine how whole numbers are used as the basis for representing all types of data in digital systems.			
To recognise that digital systems represent all types of data using number codes that are ultimately patterns of 0 and 1.			
To understand that binary represent numbers using 1s and 0s and these represent the on and off electrical states respectively in hardware and robotics.			

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### Key Words

<u>Base 10</u>	<u>Bit</u>	<u>Gigabyte</u>	<u>Base 2</u>
<u>Kilobyte</u>	<u>Digit</u>	<u>Integer</u>	

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