

Skills, knowledge and progression in Computing

Nursery and Reception

During the EYFS years, children become familiar with coding Bee Bots to go on specific routes and directions, using headphones to listen to audio, play with toy phones and use the interactive whiteboards and iPads.

Year 1					
Online Safety	Grouping and Sorting	Lego Builders	Animated Story Books	Coding	Spreadsheets
Unit 1: 4 Lessons	Unit 2: 3 Lessons	Unit 3: 3 Lessons	Unit 4: 5 Lessons	Unit 5: 6 Lessons	Unit 6: 3 Lessons
To know how to find saved work and resources. To add pictures and text to work.	To sort items using a range of criteria.	To create and order simple instructions.	To add animation, sound and backgrounds to an e-book.	To create code where characters move when clicked. To explore collision and detection.	To add images to spreadsheets and use tools to count items.
<p>Online Safety National Curriculum Strand Digital Literacy Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</p> <p>Lesson 1 To login safely. To start to introduce to the children the idea of 'ownership' of their creative work.</p> <p>Lesson 2 To know how to find saved work in the Online Work area and find teacher comments. To know how to search Purple Mash to find resources.</p> <p>Lesson 3 To become familiar with the types of resources available in the Topics section. To become more familiar with the icons used in the resources in the Topic section. To start to add pictures and text to work.</p> <p>Lesson 4 To explore the Tools section of Purple Mash and to learn about the common icons used in Purple Mash for Save, Print, Open, New. To explore the Games section on Purple Mash. To understand the importance of logging out when they have finished.</p>	<p>Grouping and Sorting National Curriculum Strand Computer Science Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Lesson 1 To sort items using a range of criteria.</p> <p>Lesson 2 To sort items on the computer using the 'Grouping' activities in Purple Mash.</p> <p>Pictograms National Curriculum Strand Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Lesson 1 To understand that data can be represented in picture format</p> <p>Lesson 2 To contribute to a class pictogram</p> <p>Lesson 3 To use a pictogram to record the results of an experiment.</p>	<p>Lego Builders National Curriculum Strand Computer Science Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.</p> <p>Lesson 1 To emphasise the importance of following instructions.</p> <p>Lesson 2 To follow and create simple instructions on the computer.</p> <p>Lesson 3 To consider how the order of instructions affects the result.</p> <p>Maze Explorers National Curriculum Strand Computer Science Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs Use logical reasoning to predict the behaviour of simple programs</p> <p>Lesson 1 To understand the functionality of the basic direction keys in Challenges 1 and 2. To be able to use the direction keys to complete the challenges successfully.</p> <p>Lesson 2 To understand the functionality of the basic direction keys in Challenges 3 and 4. To understand how to create and debug a set of instructions (algorithm).</p> <p>Lesson 3 To use the additional direction keys as part of their algorithm. To understand how to change and extend the algorithm list. To create a longer algorithm for an activity.</p> <p>Lesson 4 To provide an opportunity for the children to set challenges for each other. To provide an opportunity for the teacher to set these new challenges as 2Dos for all the class to try.</p>	<p>Animated Story Books National Curriculum Strand Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Lesson 1 To be introduced to e-books and to 2Create a Story.</p> <p>Lesson 2 To continue a previously saved story. To add animation to a story.</p> <p>Lesson 3 To add sound to a story including voice recording and music the children have created.</p> <p>Lesson 4 To work on a more complex story including adding backgrounds and copying and pasting pages</p> <p>Lesson 5 To use additional features to enhance their stories. To share their e-books on a class display board.</p>	<p>Coding National Curriculum Strand Computer Science Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs Use logical reasoning to predict the behaviour of simple programs Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Lesson 1 Introduction to coding.</p> <p>Lesson 2 Introduction to block coding on screen.</p> <p>Lesson 3 Introduction to backgrounds and characters.</p> <p>Lesson 4 Making a character move left and right.</p> <p>Lesson 5 Making a character move when clicked.</p> <p>Lesson 6 Introduction to Collision Detection.</p>	<p>Spreadsheets National Curriculum Strand Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Lesson 1 Introduction to spreadsheets</p> <p>Lesson 2 Adding images to a spreadsheet and using the image toolbox</p> <p>Lesson 3 Using the 'speak' and 'count' tools in 2Calculate to count items</p> <p>Technology Outside of School National Curriculum Strand Digital Literacy Recognise common uses of information technology beyond school</p> <p>Lesson 1 To walk around the local community and find examples of where technology is used.</p> <p>Lesson 2 To record examples of technology outside school.</p>

Year 2					
Coding	Online Safety	Spreadsheets	Questioning	Creating Pictures	Presenting Ideas
Unit 1: 5 Lessons	Unit 2: 2 Lessons	Unit 3: 4 Lessons	Unit 4: 5 Lessons	Unit 5: 5 Lessons	Unit 6: 4 Lessons
To use repeat and timer commands and debug programs.	To refine searches, share work and respond to email.	To copy and paste, add amounts and create table/lock graphs.	To construct a binary tree to separate items.	To explore pointillist art and recreate it using the lines/patterns template.	To create a quiz, fact file and presentation about a topic.
<p>Coding National Curriculum Strand Computer Science Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs Use logical reasoning to predict the behaviour of simple programs.</p> <p>Online Safety</p> <p>Lesson 1 To introduce algorithms.</p> <p>Lesson 2 To use Repeat and Timer commands.</p> <p>Lesson 3 To debug programs.</p> <p>Lesson 4 To explore the possible actions of different types of objects.</p> <p>Lesson 5 To create a more complex program to retell a story, using 2Code.</p>	<p>Online Safety National Curriculum Strand Digital Literacy Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</p> <p>Lesson 1 To know how to refine searches using the search tool.</p> <p>To know how to share work electronically using the display boards.</p> <p>Have some knowledge and understanding about sharing work on Purple Mash and the Internet.</p> <p>Lesson 2 Using 2email respond characters. How do we talk to others when they aren't there to talk in front of us?</p>	<p>Spreadsheets National Curriculum Strand Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>Lesson 1 Reviewing prior use of spreadsheets.</p> <p>Lesson 2 Copying and Pasting Totalling tools.</p> <p>Lesson 3 Using a spreadsheet to add amounts.</p> <p>Lesson 4 Creating a table and block graph.</p>	<p>Questioning National Curriculum Strand Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>Lesson 1 To show that the information provided on pictogram is of limited use beyond answering simple questions.</p> <p>Lesson 2 To use YES or No questions to separate information.</p> <p>Lesson 3 To construct a binary tree to separate different items.</p> <p>Lesson 4 Use 2Question (a binary tree) to answer questions.</p> <p>Lesson 5 To use a database to answer more complex search questions. To use the search tool to find information.</p> <p>Effective Searching National Curriculum Strand Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content Digital Literacy Recognise common uses of information technology beyond school.</p> <p>Lesson 1 To explore how a story can be presented in different ways.</p> <p>Lesson 2 To make a quiz about a story or class topic.</p> <p>Lesson 3 To make a fact file on a nonfiction topic</p> <p>Lesson 4 To make a presentation to the class.</p> <p>Lesson 1 To understand the terminology associated with searching.</p> <p>Lesson 2 To gain a better understanding about searching on the Internet.</p>	<p>Creating Pictures National Curriculum Strand Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>Lesson 1 To be introduced to 2Paint A Picture. To look at the impressionist style of art (Monet, Degas, Renoir)</p> <p>Lesson 2 To recreate pointillist art and look at the work of pointillist artists such as Seurat.</p> <p>Lesson 3 To look at the work of Piet Mondrian and recreate it using the Lines template.</p> <p>Lesson 4 To look at the work of William Morris and recreate it using the Patterns template.</p> <p>Lesson 5 To explore surrealism and eCollage</p> <p>Making Music National Curriculum Strand Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Lesson 1 To be introduced to making music digitally using 2Sequence. To explore, edit and combine sounds using 2Sequence</p>	<p>Presenting Ideas National Curriculum Strand Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Lesson 1 To explore how a story can be presented in different ways.</p> <p>Lesson 2 To make a quiz about a story or class topic.</p> <p>Lesson 3 To make a fact file on a nonfiction topic</p> <p>Lesson 4 To make a presentation to the class.</p>

Year 3					
Coding	Online Safety	Touch Typing	Email	Branching Database	Simulations
Unit 1: 6 Lessons	Unit 2: 3 Lessons	Unit 3: 4 Lessons	Unit 4: 6 Lessons	Unit 5: 4 Lessons	Unit 6: 6 Lessons
To create a program to accomplish a specific goal. To use 'if' statements and introduce variables.	To create pie charts, bar graphs and coordinates	To improve the speed and efficiency of typing.	To safely open, respond and add attachments to an email	To complete a branching database.	To explore, analyse and evaluate a simulation.
Coding National Curriculum Strand Computer Science Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Lesson 1 To design and write a program that accomplishes a specific goal. Lesson 2 To design and write a program that simulates a physical system. Lesson 3 To use repetition commands. Lesson 4 To introduce 'if' statements. Lesson 5 Debugging. Lesson 6 To introduce variables.	Online Safety National Curriculum Strand Digital Literacy Use technology safely, respectfully; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. Lesson 1 Safe passwords and communication methods. Lesson 2 Is everything on the Internet true? Spreadsheets National Curriculum Strand Computer Science Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Lesson 1 To create pie charts and bar graphs. Lesson 2 To use the 'more than', 'less than' and 'equals' tools. Lesson 3 To introduce the Advanced Mode of 2Calculate and use coordinates	Touch Typing National Curriculum Strand Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Lesson 1 To discuss the need for correct posture when typing. To introduce typing terminology. Lesson 2 To practise and improve typing skills. Lesson 3 To start to type words. Lesson 4 To improve the speed and efficiency of typing skills.	Email National Curriculum Strand Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Computer Science Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration. Digital Literacy Use technology safely, respectfully and responsibly; recognise Acceptable and unacceptable behaviour; identify a range of ways to report concerns about content and contact. Lesson 1 To think about the different methods of communication. Lesson 2 To open and respond to an email. To write an email to someone, using an address book. Lesson 3 To learn how to use email safely. Lesson 4 To learn how to use email safely. Lesson 5 To add an attachment to an email. Lesson 6 To explore a simulated email scenario.	Branching Database National Curriculum Strand Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Lesson 1 To sort objects using just YES/NO questions. Lesson 2 To complete a branching database using 2Question. Lesson 3 and 4 To create a branching database of the children's choice.	Simulations National Curriculum Strand Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Lesson 1 To look at what simulations are. Lesson 2 To explore a simulation. Lesson 3 To analyse and evaluate a simulation. Graphing National Curriculum Strand Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Lesson 1 To enter data into a graph and answer questions Lesson 2 To solve an investigation and present the results in graphic form.

Year 4					
Coding	Online Safety	Spreadsheets	Writing for Different Audiences	Logo	Effective Searching
Unit 1: 6 Lessons	Unit 2: 4 Lessons	Unit 3: 5 Lessons	Unit 4: 5 Lessons	Unit 5: 4 Lessons	Unit 6: 6 Lessons
To create a program with a character that repeats actions.	To understand how to protect yourself from identity theft and that everything you do online leaves a digital footprint.	To add formulae and formatting cells.	To change font size and style to change the impact of a text.	To use the language of logo to create letters.	To search effectively to locate information and consider what makes a reliable source.
Coding National Curriculum Strand Computer Science Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Lesson 1 To review coding vocabulary. To use a sketch or storyboard to represent a program design and algorithm. To use the design to create a program. Lesson 2 To introduce the If/else statement and use it in a program. To create a variable. To explore a flowchart design for a program with an if/else statement To create a program which responds to the	Online Safety National Curriculum Strand Computer Science Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration. Digital Literacy Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. Lesson 1 To understand how children can protect themselves from online identity theft. Understand that information put online leaves a digital footprint or trail and that this can aid identity theft. Lesson 2 To Identify the risks and benefits of installing software including apps. Lesson 3 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. Lesson 4 To identify the positive and negative influences of technology on health and the environment. To	Spreadsheets National Curriculum Strand Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Lesson 1 Using the formula wizard in the advanced mode to add formulae and explore formatting cells Lesson 2 Timer and spin button Lesson 3 Line graphs Lesson 4 Using a spreadsheet for budgeting Lesson 5 Exploring Place Value with a spreadsheet	Writing for Different Audiences National Curriculum Strand Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Lesson 1 To explore how font size and style can affect the impact of a text. Lesson 2 and 3 To use a simulated scenario to produce a news report. Lesson 4 and 5 To use a simulated scenario to produce a news report.	Logo National Curriculum Strand Computer Science Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Lesson 1 To learn the language of Logo. To input simple instructions on Logo. Lesson 2 For the children to use Logo to create letters. Lesson 3 For the children to use Logo to create letters. Lesson 4 Animation National Curriculum Strand Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Effective Searching National Curriculum Strand Computer Science Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration. Information Technology Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Lesson 1 To locate information on the search results page. Lesson 2 To use search effectively to find out information. Lesson 3 To assess whether an information source is true and reliable. Hardware Investigators National Curriculum Strand Computer Science Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration. Lesson 1 To understand the different parts that make up a computer. Lesson 2 To recall the different parts that make up a computer.

<p>If/else command, using the value of the variable.</p> <p>Lesson 3</p> <p>To create a program with a character that repeats actions. To use the Repeat Until command to make characters repeat actions.</p> <p>To program a character to respond to user keyboard input</p> <p>Lesson 4</p> <p>To create a program with a character that repeats actions. To use the Repeat Until command to make characters repeat actions.</p> <p>To program a character to respond to user keyboard input</p> <p>Lesson 5</p> <p>To explore how 2Code can be used to investigate control by creating a simulation.</p> <p>Lesson 6</p> <p>To know what decomposition and abstraction are in computer science.</p> <p>To take a real-life situation, decompose it and think about the level of abstraction.</p> <p>To design a decomposed feature of a real-life situation.</p>	<p>understand the importance of balancing game and screen time with other parts of their lives.</p>			<p>Lesson 1</p> <p>To discuss what makes a good animated film or cartoon and what their favourites are. To learn how animations are created by hand. To find out how 2Animate can be created in a similar way using the computer.</p> <p>Lesson 2</p> <p>To learn about onion skinning in animation. To add backgrounds and sounds to animations.</p> <p>Lesson 3</p> <p>To be introduced to stop motion animation. To share animation on the class display board and by blogging.</p>	
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Year 5					
Coding	Online Safety	Spreadsheets	Databases	Game Creator	Concept Maps
Unit 1: 6 Lessons	Unit 2: 2 Lessons	Unit 3: 5 Lessons	Unit 4: 5 Lessons	Unit 5: 5 Lessons	Unit 6: 4 Lessons
To create and improve a game and introduce text variables.	To understand how to keep personal information safe and the reliability of sources/people online	To use spreadsheets for conversions and to plan an event.	To create a database around a chosen topic.	To create a game environment and share a game.	To create a collaborative concept map and present this to an audience.
Coding National Curriculum Strands Computer Science Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use sequence, selection and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Informational Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Lesson 1 Designing and writing a program that accomplishes a specific goal. Lesson 2 Simulating a physical system. Lesson 3 Introducing text variables. Lesson 4 and 5 Creating and improving a game. Lesson 6 Internet safety.	Online Safety National Curriculum Strands Computer Science Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration. Digital Literacy Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. Lesson 1 To discuss and understand the importance of keeping personal information safe. To understand issues concerning the reliability of sources and people online. Lesson 2 To create a comic strip to share my knowledge about online safety.	Spreadsheets National Curriculum Strands Informational Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Lesson 1 Conversions of measurements. Lesson 2 Novel use of the count tool. Lesson 3 Formulae including the advanced mode. Lesson 4 Using text variables to perform calculations. Lesson 5 Using a spreadsheet to plan an event.	Databases National Curriculum Strands Informational Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Lesson 1 To learn how to search for information on a database. Lesson 2 To contribute to a class database. Lesson 3 and 4 To create a database around a chosen topic.	Game Creator National Curriculum Strands Computer Science Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Informational Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Lesson 1 To set the scene. Lesson 2 To create the game environment. Lesson 3 To create the game quest. Lesson 4 To finish and share the game Lesson 5 To finish and share the game Modelling National Curriculum Strands Informational Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Lesson 1 To be introduced to 2Design and Make Lesson 2 To explore the effect of moving points when designing. Lesson 3 To understand designing for a purpose. Lesson 4 To understand designing for a purpose.	Concept Maps National Curriculum Strands Informational Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Lesson 1 To understand the need for visual representation when generating and discussing complex ideas Lesson 2 To understand and use the correct vocabulary when creating a concept map. To create a concept map Lesson 3 To understand how a concept map can be used to retell stories and information. Lesson 4 To create a collaborative concept map and present this to an audience.

Year 6					
Coding	Online Safety	Spreadsheets	Blogging	Text Adventure	Quizzing
Unit 1: 6 Lessons	Unit 2: 3 Lessons	Unit 3: 5 Lessons	Unit 4: 5 Lessons	Unit 5: 4 Lessons	Unit 6: 6 Lessons
To design programs using objects and attribute specific actions using programming knowledge.	To understand how to balance screen time, how a digital footprint leaves a lasting impact and the dangers of broadcasting location.	To use a spreadsheet to model a real-life situation and come up with solutions that can be applied to real life.	To identify the purpose of writing a blog and the features of successful blog writing.	To code a map based adventure.	To make a quiz that requires the player to search a database.
<p>Coding National Curriculum Strand Computer Science Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p> <p>Lesson 1 and 2 To review good planning skills. To design programs using their choice of objects, attributing specific actions to each using their new programming knowledge. To use variables within a game to keep track of the properties of objects. Lesson 3 To use functions and understand why they are useful in 2Code. To debug a program and organise the code into tabs. To organise code into functions and Call functions to eliminate surplus code in the program. Lesson 4 To explore the options for getting text input from the user in 2Code. How to include interactivity in programming. Lesson 5 To use flowcharts to test and debug a program. To create a simulation of a room in which devices can be controlled. Lesson 6</p>	<p>Online Safety National Curriculum Strand Computer Science Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration. Information Technology Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Digital Literacy Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact*</p> <p>Lesson 1 Identify benefits and risks of mobile devices broadcasting the location of the user/device, e.g. apps accessing location. Identify secure sites by looking for privacy seals of approval, e.g. https, padlock icon. Identify the benefits and risks of giving personal information and device access to different software. Lesson 2 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. Lesson 3 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</p>	<p>Spreadsheets National Curriculum Strand Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p> <p>Lesson 1 To explore probability. Lesson 2 To understand the use of spreadsheets in 'real life' To create a computational model Lesson 3 To make practical use of a spreadsheet to help plan actions Lesson 4 and 5 To use a spreadsheet to model a real-life situation and come up with solutions that can be applied to real life.</p>	<p>Blogging National Curriculum Strand Computer Science Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration. Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Digital Literacy Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact*</p> <p>Lesson 1 To identify the purpose of writing a blog. To identify the features of successful blog writing Lesson 2 To plan the theme and content for a blog. Lesson 3 To understand how to write a blog. To consider the effect upon the audience of changing the visual properties of the blog. To understand the importance of regularly updating the content of a blog. Lesson 4 To understand how to contribute to an existing blog. To understand how and why blog posts are approved by the teacher. Lesson 5 To understand the importance of commenting on blogs. To peer-assess blogs against the agreed success criteria.</p>	<p>Text Adventures National Curriculum Strand Computer Science Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p> <p>Lesson 1 To find out what a text adventure is. To plan a story adventure. Lesson 2 To make a story-based adventure. Lesson 3 To introduce map-based text adventures. Lesson 4 To code a map-based text adventure.</p> <p>Networks National Curriculum Strand Computer Science Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration.</p> <p>Lesson 1 To discover what the children know about the internet. Lesson 2 To find out what a LAN and a WAN are. To find out how we access the internet in school.</p>	<p>Quizzing National Curriculum Strand Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p> <p>Lesson 1 To make a picture quiz for young children. Lesson 2 and 3 To learn how to use the question types within 2Quiz. Lesson 4 To explore the grammar quizzes. Lesson 5 To make a quiz that requires the player to search a database. Lesson 6 To use their knowledge of quiz types to create a quiz show quiz based on a curriculum area.</p>

To explore how 2Code can be used to make a text-based adventure game.	stop playing and the effect this has on their health. To identify the positive and negative influences of technology on health and the environment.			Lesson 3 To research and find out about the age of the internet. To think about what the future might hold.	
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