



Skills, Knowledge and Progression in Computing

Our computing curriculum develops pupils' understanding of computer science, information technology and digital literacy through a clearly sequenced progression of knowledge and skills. Pupils build from early exploration of technology in EYFS to designing, creating and evaluating digital systems by Year 6. Teaching is supported by Purple Mash to ensure consistency, progression and increasing independence.

Nursery

In Nursery, children are introduced to technology through play and exploration. They begin to understand that technology is part of everyday life and can be used for different purposes. Children experience simple cause and effect through using basic digital toys and devices, and they are encouraged to explore technology such as interactive whiteboards, and listening devices with adult support. Early skills in turn-taking, curiosity, and purposeful exploration are developed through hands-on experiences.

Children are introduced to technology through play and exploration.

Key skills:

- Use simple cause-and-effect toys and devices
- Follow single-step instructions
- Begin to take turns when using technology
- Explore devices such as tablets, interactive whiteboards and audio players with support

Key understanding:

- Technology is used in everyday life
- Actions have outcomes (press → something happens)



Reception

In Reception, children build on their early experiences and begin to show greater control and understanding of simple technology. They start to explore basic programming concepts using resources such as Bee-Bots, giving simple instructions to achieve a desired outcome. Children use interactive whiteboards more independently to support learning across the curriculum. They begin to understand that technology follows instructions and can be used to solve simple problems, developing early computational thinking skills such as sequencing and logical thinking.

Children build on early exploration and begin to use technology with purpose and increasing independence.

Key skills:

- Give simple sequences of instructions (e.g. using Bee-Bots)
- Predict what will happen when instructions are given
- Use technology independently within continuous provision
- Begin to use technology to create simple outcomes (e.g. drawing, recording)

Key understanding:

- Technology follows instructions
- Instructions must be in the correct order (early sequencing)
- Technology can be used to solve simple problems



Year 1

Focus: Introduction to technology and simple programming

Key skills:

- Log in and navigate Purple Mash
- Create simple digital content (ebooks, images, pictograms)
- Understand and create simple instructions
- Begin coding (simple movement and actions)

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>Lesson 1 To log in safely and understand that work created online belongs to the person who made it.</p> <p>Lesson 2 To find saved work, view feedback and search for resources on Purple Mash.</p> <p>Lesson 3 To explore the Topics section and add pictures and text to work.</p> <p>Lesson 4 To explore the Tools and Games sections, use common icons and log out safely.</p> <p>Prior Learning Children have explored using simple devices and know that technology is used at home and school.</p> <p>Future Learning Children will build understanding of staying safe online, protecting personal information, and using login details independently.</p> <p>Key Vocabulary login, password, save, open, instruction</p>	<p>Lesson 1 To sort items using different criteria.</p> <p>Lesson 2 To sort items on a computer using grouping activities in Purple Mash.</p> <p>Pictograms Progression Overview</p> <p>Lesson 1 To understand that data can be represented using pictures.</p> <p>Lesson 2 To create and interpret a class pictogram.</p> <p>Lesson 3 To use a pictogram to record and present data from an experiment.</p> <p>Prior Learning Children can recognise similarities and differences between objects and begin to talk about how things can be grouped.</p>	<p>Lesson 1 To understand the importance of following instructions accurately.</p> <p>Lesson 2 To follow and create simple instructions on a computer.</p> <p>Lesson 3 To understand how the order of instructions affects an outcome.</p> <p>Maze Explorers Progression Overview</p> <p>Lesson 1 To use basic direction keys to complete simple challenges.</p> <p>Lesson 2 To create and debug a simple set of instructions.</p> <p>Lesson 3 To use additional direction keys to create and improve longer algorithms.</p> <p>Lesson 4 To create and share coding challenges with others.</p>	<p>Lesson 1 To explore e-books and use 2Create a Story.</p> <p>Lesson 2 To continue and add animation to a saved story.</p> <p>Lesson 3 To add sound, voice recordings and music to a story.</p> <p>Lesson 4 To create a more complex story using backgrounds and copied pages.</p> <p>Lesson 5 To enhance and share an e-book using additional features.</p> <p>Prior Learning Children can listen to and retell stories and use simple drawing or writing tools on devices.</p> <p>Future Learning Children will create more complex digital stories including sound, animation, and interactive elements.</p> <p>Key Vocabulary save, open, image, instruction</p>	<p>Lesson 1 To understand that coding gives instructions to a computer.</p> <p>Lesson 2 To use block coding to create simple programs on screen.</p> <p>Lesson 3 To add and use backgrounds and characters in a program.</p> <p>Lesson 4 To make a character move left and right using code.</p> <p>Lesson 5 To make a character move when clicked.</p> <p>Lesson 6 To understand and use simple collision detection in a program.</p> <p>Prior Learning Children can follow simple step-by-step instructions and understand cause and effect.</p> <p>Future Learning Children will develop coding skills using sequences, events, loops, and debugging in more complex programs.</p>	<p>Lesson 1 To understand the purpose of a spreadsheet and enter data.</p> <p>Lesson 2 To add and edit images in a spreadsheet using the image tools.</p> <p>Lesson 3 To use count and speak tools to collect and present data.</p> <p>Technology Outside of School Progression Overview</p> <p>Lesson 1 To identify examples of technology used in the local community.</p> <p>Lesson 2 To record and describe examples of technology used outside school.</p> <p>Prior Learning Children can count objects and record simple data using pictures or marks.</p> <p>Future Learning Children will use digital spreadsheets to organise, calculate, and present data in Year 2 and beyond.</p>
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	<p>Future Learning Children will begin to organise and present data using digital tools such as pictograms and simple databases.</p> <p>Key Vocabulary instruction, sort, group, save</p>	<p>Prior Learning Children can follow simple classroom instructions and sequences in daily routines.</p> <p>Future Learning Children will develop understanding of algorithms and begin to debug simple programs in Year 2.</p> <p>Key Vocabulary instruction, order, open, save</p>		<p>Key Vocabulary instruction, open, save, login</p>	<p>Key Vocabulary image, save, open, instruction</p>
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Year 2

Focus: Developing control and presenting information

Key skills:

- Use repetition and debug simple programs
- Create graphs and structured data
- Use databases (binary trees)
- Present ideas digitally (quizzes, fact files)

Coding	Online Safety	Spreadsheets	Questioning	Creating	Presenting Ideas
Unit 1: 5 Lessons	Unit 2: 2 Lessons	Unit 3: 4 Lessons	Unit 4: 5 Lessons	Pictures 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>Lesson 1 To understand what an algorithm is.</p> <p>Lesson 2 To use repeat and timer commands in programs.</p> <p>Lesson 3 To debug simple programs.</p> <p>Lesson 4 To explore actions of different objects in a program.</p> <p>Lesson 5 To create a program to retell a story using code.</p> <p>Prior Learning Children can follow simple step-by-step instructions and understand cause and effect.</p> <p>Future Learning Children will develop more complex programming skills including sequencing, selection and debugging.</p> <p>Key Vocabulary algorithm, code, debug</p>	<p>Lesson 1 To refine searches using the search tool and share work using display boards.</p> <p>Lesson 2 To use 2Email to communicate with others online.</p> <p>Prior Learning Children can log in safely and open saved work.</p> <p>Future Learning Children will develop understanding of safe communication and sharing information responsibly online.</p> <p>Key Vocabulary search, share, email, personal information</p>	<p>Lesson 1 To review prior use of spreadsheets.</p> <p>Lesson 2 To copy and paste data and use totalling tools in a spreadsheet.</p> <p>Lesson 3 To use a spreadsheet to add and calculate amounts.</p> <p>Lesson 4 To create a table and block graph.</p> <p>Prior Learning Children can enter simple data into a spreadsheet.</p> <p>Future Learning Children will use spreadsheets to organise, calculate and present data in more complex ways.</p> <p>Key Vocabulary document, file, search, spreadsheet</p>	<p>Lesson 1 To understand that pictograms have limited usefulness beyond answering simple questions.</p> <p>Lesson 2 To use yes/no questions to sort and separate information.</p> <p>Lesson 3 To construct a binary tree to classify different items.</p> <p>Lesson 4 To use a binary tree tool to answer questions.</p> <p>Lesson 5 To use a database and search tools to answer more complex questions and find information.</p> <p>Prior Learning Children can use simple search tools and answer basic questions about data.</p> <p>Future Learning Children will develop skills in using databases, structured searching and evaluating information sources.</p> <p>Key Vocabulary search, database, information, question, file</p>	<p>Lesson 1 To be introduced to 2Paint A Picture and explore impressionist art (Monet, Degas, Renoir).</p> <p>Lesson 2 To recreate pointillist art and explore the work of Georges Seurat.</p> <p>Lesson 3 To recreate Mondrian-style art using the Lines template.</p> <p>Lesson 4 To recreate William Morris-inspired patterns using the Patterns template.</p> <p>Lesson 5 To explore surrealism and create digital collage (eCollage).</p> <p>Prior Learning Children can use simple digital tools to create images and explore sound.</p> <p>Future Learning Children will develop more advanced digital art and music skills, combining and editing multimedia content.</p>	<p>Lesson 1 To explore how a story can be presented in different ways.</p> <p>Lesson 2 To create a quiz about a story or class topic.</p> <p>Lesson 3 To create a fact file on a non-fiction topic.</p> <p>Lesson 4 To create and present ideas to a class.</p> <p>Prior Learning Children can talk about ideas and use simple digital tools to record and share work.</p> <p>Future Learning Children will develop skills in creating structured digital presentations and combining text, images and information for an audience.</p> <p>Key Vocabulary document, file, share, search, information</p>
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				<p>Key Vocabulary image, file, save, code, document</p>	
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Year 1 / 2 Cycle A (Year 1 emphasis)

Focus: Introduction to technology and simple programming

Key skills:

- Log in and navigate Purple Mash
- Create simple digital content (ebooks, images, pictograms)
- Understand and create simple instructions
- Begin coding (simple movement and actions)

Online Safety Unit 1: 4 Lessons	Grouping and Sorting Unit 2: 3 Lessons	Lego Builders Unit 3: 3 Lessons	Animated Story Books Unit 4: 5 Lessons	Coding Unit 5: 6 Lessons	Spreadsheets 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>Lesson 1 To log in safely and understand that online work belongs to the creator.</p> <p>Lesson 2 To find saved work, use resources, and view feedback.</p> <p>Lesson 3 To explore online tools to create and add content.</p> <p>Lesson 4 To use digital tools safely and log out correctly.</p> <p>Prior Learning Children can use simple devices and know technology is used in school and at home.</p> <p>Future Learning Children will begin to understand safe communication, personal information, and digital responsibility.</p> <p>Key Vocabulary login, password, save, open</p>	<p>Lesson 1 To sort objects using simple criteria.</p> <p>Lesson 2 To group objects using a computer.</p> <p>Lesson 3 To record grouped information using digital tools.</p> <p>Prior Learning Children can recognise similarities and differences between objects.</p> <p>Future Learning Children will use sorting to support databases and structured data.</p> <p>Key Vocabulary sort, group, data</p>	<p>Lesson 1 To follow simple instructions accurately.</p> <p>Lesson 2 To create simple instructions on a computer.</p> <p>Lesson 3 To understand that order affects outcomes.</p> <p>Prior Learning Children can follow classroom routines and verbal instructions.</p> <p>Future Learning Children will develop understanding of algorithms and debugging.</p> <p>Key Vocabulary instruction, order</p>	<p>Lesson 1 To explore digital storybooks.</p> <p>Lesson 2 To add animation to a story.</p> <p>Lesson 3 To add sound and images to a story.</p> <p>Lesson 4 To develop and share a digital story.</p> <p>Lesson 5 To improve and enhance a digital story.</p> <p>Prior Learning Children can listen to and retell stories.</p> <p>Future Learning Children will create interactive multimedia stories.</p> <p>Key Vocabulary image, save, open</p>	<p>Lesson 1 To understand that programs give instructions to a computer.</p> <p>Lesson 2 To create simple block-based programs.</p> <p>Lesson 3 To use backgrounds and characters in a program.</p> <p>Lesson 4 To make characters move using code.</p> <p>Lesson 5 To trigger movement using events.</p> <p>Lesson 6 To explore simple collisions in programs.</p> <p>Prior Learning Children can follow simple sequences and instructions.</p> <p>Future Learning Children will use selection, repetition and variables in coding.</p> <p>Key Vocabulary instruction, save, open</p>	<p>Lesson 1 To enter data into a simple spreadsheet.</p> <p>Lesson 2 To add images and organise data.</p> <p>Lesson 3 To use simple tools to count and present data.</p> <p>Prior Learning Children can count and record simple information.</p> <p>Future Learning Children will use spreadsheets to calculate and analyse data.</p> <p>Key Vocabulary image, data, save</p>
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Year 1 / 2 Cycle B (Year 2 emphasis)

Focus: Developing control and presenting information

Key skills:

- Use repetition and debug simple programs
- Create graphs and structured data
- Use databases (binary trees)
- Present ideas digitally (quizzes, fact files)

Coding	Online Safety	Spreadsheets	Questioning	Creating	Presenting Ideas
Unit 1: 5 Lessons	Unit 2: 2 Lessons	Unit 3: 4 Lessons	Unit 4: 5 Lessons	Pictures 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>Lesson 1 To refine searches and understand online sharing.</p> <p>Lesson 2 To communicate safely using email tools.</p> <p>Prior Learning Children can log in and use digital tools safely.</p> <p>Future Learning Children will evaluate online safety, communication and digital responsibility.</p> <p>Key Vocabulary search, share, email</p>	<p>Lesson 1 To represent data using pictures.</p> <p>Lesson 2 To create and interpret pictograms.</p> <p>Lesson 3 To use pictograms to record data from experiments.</p> <p>Prior Learning Children can group objects using simple criteria.</p> <p>Future Learning Children will work with structured data in databases and spreadsheets.</p> <p>Key Vocabulary data, sort, group</p>	<p>Lesson 1 To follow and create algorithms.</p> <p>Lesson 2 To create and debug simple programs.</p> <p>Lesson 3 To understand how order affects programs.</p> <p>Prior Learning Children can follow simple instructions.</p> <p>Future Learning Children will debug and refine more complex algorithms.</p> <p>Key Vocabulary instruction, order, debug</p>	<p>Lesson 1 To create and continue a digital story.</p> <p>Lesson 2 To add animation and effects.</p> <p>Lesson 3 To add sound and voice recordings.</p> <p>Lesson 4 To develop more complex digital stories.</p> <p>Lesson 5 To publish and share digital stories.</p> <p>Prior Learning Children can create simple digital stories.</p> <p>Future Learning Children will design multimedia presentations with interactivity.</p> <p>Key Vocabulary image, save, open</p>	<p>Lesson 1 To understand and use algorithms in programming.</p> <p>Lesson 2 To use repetition in programs.</p> <p>Lesson 3 To debug simple programs.</p> <p>Lesson 4 To explore different object behaviours in code.</p> <p>Lesson 5 To create a program to retell a story.</p> <p>Prior Learning Children can create simple sequences in code.</p> <p>Future Learning Children will use selection, variables and more complex logic.</p> <p>Key Vocabulary algorithm, code, debug</p>	<p>Lesson 1 To review and use spreadsheets effectively.</p> <p>Lesson 2 To copy, paste and total data.</p> <p>Lesson 3 To calculate and organise information.</p> <p>Lesson 4 To create tables and graphs.</p> <p>Prior Learning Children can enter and organise simple data.</p> <p>Future Learning Children will use spreadsheets for modelling and analysis.</p> <p>Key Vocabulary data, file, spreadsheet</p>
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Year 3

Focus: Expanding programming and communication

Key skills:

- Use sequence, repetition, and selection (if statements)
- Introduce variables
- Use email safely
- Analyse data using branching databases

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.



<p>Lesson 1 To design and write a program to achieve a specific goal.</p> <p>Lesson 2 To design and write a program that simulates a physical system.</p> <p>Lesson 3 To use repetition in a program.</p> <p>Lesson 4 To use “if” statements in coding.</p> <p>Lesson 5 To debug programs to find and fix errors.</p> <p>Lesson 6 To use variables in a program.</p> <p>Prior Learning Children can create simple programs using sequences and events.</p> <p>Future Learning Children will develop more complex programming skills including selection, variables, and problem-solving through debugging.</p> <p>Key Vocabulary program, input, output, data</p>	<p>Lesson 1 To create safe passwords and understand safe communication methods.</p> <p>Lesson 2 To question whether information online is always true.</p> <p>Prior Learning Children understand how to log in safely and communicate online.</p> <p>Future Learning Children will develop critical thinking skills about online information and safe digital communication.</p> <p>Key Vocabulary password, data, search</p>	<p>Lesson 1 To create pie charts and bar graphs.</p> <p>Lesson 2 To use more than, less than and equals tools in a spreadsheet.</p> <p>Lesson 3 To use advanced spreadsheet tools and coordinates.</p> <p>Prior Learning Children can enter data and create simple graphs.</p> <p>Future Learning Children will use spreadsheets to analyse data and solve problems using more advanced functions.</p> <p>Key Vocabulary data, input, output</p>	<p>Lesson 1 To understand correct posture and typing terminology.</p> <p>Lesson 2 To practise and improve typing skills.</p> <p>Lesson 3 To begin typing words accurately.</p> <p>Lesson 4 To improve speed and efficiency when typing.</p> <p>Prior Learning Children can use keyboards to enter simple text.</p> <p>Future Learning Children will type with greater accuracy and speed for a range of digital tasks.</p> <p>Key Vocabulary input, output, folder</p>	<p>Lesson 1 To understand different methods of communication.</p> <p>Lesson 2 To open and respond to an email using an address book.</p> <p>Lesson 3 To use email safely.</p> <p>Lesson 4 To continue using email safely.</p> <p>Lesson 5 To add an attachment to an email.</p> <p>Lesson 6 To explore a simulated email scenario.</p> <p>Prior Learning Children can communicate online in simple ways and understand basic safety rules.</p> <p>Future Learning Children will use email independently and responsibly, including attachments and communication etiquette.</p> <p>Key Vocabulary email, attachment, data, search</p>	<p>Lesson 1 To sort objects using yes/no questions.</p> <p>Lesson 2 To complete a branching database using 2Question.</p> <p>Lesson 3 To create a branching database.</p> <p>Lesson 4 To continue and refine a branching database.</p> <p>Prior Learning Children can sort and group objects using simple criteria.</p> <p>Future Learning Children will use structured databases and logical questioning to organise information.</p> <p>Key Vocabulary data, input, output</p>
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Year 4

Focus: Control, design and evaluation

Key skills:

- Use if/else statements and variables
- Design programs using flowcharts
- Use spreadsheets (formulae, graphs)
- Evaluate online information

Coding Unit 1: 6 Lessons	Online Safety Unit 2: 4 Lessons	Spreadsheets Unit 3: 5 Lessons	Writing for Different Audiences Unit 4: 5 Lessons	Logo Unit 5: 4 Lessons	Effective Searching 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.



<p>Lesson 1 To use storyboards and sketches to design and create a program.</p> <p>Lesson 2 To use if/else statements and variables in a program.</p> <p>Prior Learning Children can create simple programs using sequences and events.</p> <p>Future Learning Children will develop more advanced programming skills including selection, variables and logical decision making.</p> <p>Key Vocabulary event, commands, output</p>	<p>Lesson 1 To understand how to protect personal information and online identity.</p> <p>Lesson 2 To understand the risks and benefits of installing software and apps.</p> <p>Lesson 3 To understand plagiarism and appropriate online behaviour.</p> <p>Lesson 4 To understand how technology can affect health and the environment.</p> <p>Prior Learning Children understand basic rules for staying safe online and using the internet responsibly.</p> <p>Future Learning Children will develop a deeper understanding of digital responsibility, online safety, and ethical use of information.</p> <p>Key Vocabulary online identity, event, commands</p>	<p>Lesson 1 To use formula wizard and format cells in a spreadsheet.</p> <p>Lesson 2 To use timer and spin button tools in a spreadsheet.</p> <p>Lesson 3 To create and interpret line graphs.</p> <p>Lesson 4 To use spreadsheets for budgeting.</p> <p>Lesson 5 To explore place value using a spreadsheet.</p> <p>Prior Learning Children can enter data and create simple graphs in spreadsheets.</p> <p>Future Learning Children will use spreadsheets to model real-world data and solve mathematical problems.</p> <p>Key Vocabulary spreadsheet, cell, output</p>	<p>Lesson 1 To explore how font size and style affect text impact.</p> <p>Lesson 2 To use a simulated scenario to create a news report.</p> <p>Lesson 3 To continue creating a news report using a simulated scenario.</p> <p>Lesson 4 To refine and present a news report for an audience.</p> <p>Prior Learning Children can create simple digital texts and format basic writing.</p> <p>Future Learning Children will adapt writing for different audiences using a range of digital tools and features.</p> <p>Key Vocabulary output, commands, online identity</p>	<p>Lesson 1 To learn the language of Logo and input simple instructions.</p> <p>Lesson 2 To use Logo to create letters.</p> <p>Lesson 3 To use Logo to create patterns and shapes.</p> <p>Lesson 4 To use Logo to create and refine designs.</p> <p>Prior Learning Children can follow and create simple coding instructions.</p> <p>Future Learning Children will develop understanding of procedural programming and debugging.</p> <p>Key Vocabulary commands, event, output</p>	<p>Lesson 1 To locate information on a search results page.</p> <p>Lesson 2 To use search tools effectively to find information.</p> <p>Lesson 3 To evaluate whether online information is reliable.</p> <p>Prior Learning Children can use simple search tools to find information.</p> <p>Future Learning Children will develop critical evaluation skills when researching online information.</p> <p>Key Vocabulary online identity, spreadsheet, cell</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.



<p>To design and write a program that achieves a specific goal.</p> <p>Lesson 2 To simulate a physical system using a program.</p> <p>Lesson 3 To use text variables in programming.</p> <p>Lesson 4 To create and improve a game.</p> <p>Lesson 5 To continue creating and refining a game.</p> <p>Lesson 6 To understand internet safety in relation to coding and online use.</p> <p>Prior Learning Children can use variables, selection and repetition in simple programs.</p> <p>Future Learning Children will develop more complex programming systems, including real-world simulation and game design.</p> <p>Key Vocabulary variable, efficient, row, column</p>	<p>Lesson 1 To understand how to keep personal information safe and identify reliable online sources.</p> <p>Lesson 2 To create a comic strip to show understanding of online safety.</p> <p>Prior Learning Children understand basic online safety rules and safe communication.</p> <p>Future Learning Children will evaluate online content critically and understand digital responsibility and safety in greater depth.</p> <p>Key Vocabulary real, fake, sharing safely</p>	<p>Lesson 1 To convert measurements using a spreadsheet.</p> <p>Lesson 2 To use the count tool in a spreadsheet.</p> <p>Lesson 3 To use formulae including advanced mode.</p> <p>Lesson 4 To use text variables in calculations.</p> <p>Lesson 5 To use a spreadsheet to plan an event.</p> <p>Prior Learning Children can use spreadsheets to organise and present data.</p> <p>Future Learning Children will use spreadsheets to model real-world situations and solve complex problems.</p> <p>Key Vocabulary variable, row, column</p>	<p>Lesson 1 To search for information in a database.</p> <p>Lesson 2 To contribute to a class database.</p> <p>Lesson 3 To create a database on a chosen topic.</p> <p>Lesson 4 To continue and refine a database project.</p> <p>Prior Learning Children can use simple sorting and searching tools.</p> <p>Future Learning Children will develop advanced skills in organising, searching and analysing data in databases.</p> <p>Key Vocabulary row, column, variable</p>	<p>Lesson 1 To design the scene for a game.</p> <p>Lesson 2 To create a game environment.</p> <p>Lesson 3 To design and build a game quest.</p> <p>Lesson 4 To finish and share a completed game.</p> <p>Lesson 5 To refine, test and share a completed game.</p> <p>Prior Learning Children can create simple programs and interactive content.</p> <p>Future Learning Children will design and build more complex interactive games with multiple features.</p> <p>Key Vocabulary efficient, variable, real</p>	<p>Future Learning Children will design and evaluate 3D models for real-world purposes.</p> <p>Key Vocabulary variable, efficient, real</p> <p>Lesson 1 To understand how concept maps help organise complex ideas.</p> <p>Lesson 2 To create a concept map using correct vocabulary.</p> <p>Lesson 3 To use concept maps to retell stories and information.</p> <p>Lesson 4 To create and present a collaborative concept map.</p> <p>Prior Learning Children can organise simple ideas and information visually.</p> <p>Future Learning Children will use concept mapping to plan, structure and present complex ideas across subjects.</p> <p>Key Vocabulary real, fake, sharing safely</p>
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Year 6

Focus: Mastery and complexity

Key skills:

- Design complex programs using functions and variables
- Debug and refine efficiently
- Model real-life scenarios using spreadsheets
- Understand digital identity and online responsibility

Coding Unit 1: 6 Lessons	Online Safety Unit 2: 3 Lessons	Spreadsheets Unit 3: 5 Lessons	Blogging Unit 4: 5 Lessons	Text Adventure Unit 5: 4 Lessons	Quizzing 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>Lesson 1 To design complex programs using objects and attributes.</p> <p>Lesson 2 To use variables within a program to store and track information.</p> <p>Lesson 3 To use functions to organise and simplify code.</p> <p>Lesson 4 To add user input and interactivity to a program.</p> <p>Lesson 5 To use flowcharts to test, debug and improve programs.</p> <p>Lesson 6 To create a simulation using coding to control real-life scenarios.</p> <p>Prior Learning Children can use variables, selection, repetition and debugging in programs.</p> <p>Future Learning Children will apply computational thinking to increasingly complex systems and real-world modelling.</p> <p>Key Vocabulary abstraction, filter, media</p>	<p>Lesson 1 To understand risks of sharing location and how to identify secure websites.</p> <p>Lesson 2 To understand digital footprints and how online information can be used.</p> <p>Lesson 3 To understand how screen time affects health and wellbeing.</p> <p>Prior Learning Children understand how to stay safe online and protect personal information.</p> <p>Future Learning Children will develop critical awareness of digital identity, online responsibility and safe participation in digital spaces.</p> <p>Key Vocabulary secure, media, filter</p>	<p>Lesson 1 To explore probability using a spreadsheet.</p> <p>Lesson 2 To use spreadsheets to model real-life situations.</p> <p>Lesson 3 To use spreadsheets to plan actions and solve problems.</p> <p>Lesson 4 To use spreadsheets to model real-life scenarios and test solutions.</p> <p>Lesson 5 To apply spreadsheet skills to solve real-world problems.</p> <p>Prior Learning Children can use spreadsheets to organise, calculate and present data.</p> <p>Future Learning Children will use digital tools to model complex real-world systems and interpret data critically.</p> <p>Key Vocabulary abstraction, filter, media</p>	<p>Lesson 1 To identify the purpose and features of a blog.</p> <p>Lesson 2 To plan the theme and content of a blog.</p> <p>Lesson 3 To create and maintain a blog, considering audience and design.</p> <p>Lesson 4 To contribute to and moderate a blog safely.</p> <p>Lesson 5 To comment on and evaluate blog posts against criteria.</p> <p>Prior Learning Children can create digital texts and understand audience in writing.</p> <p>Future Learning Children will communicate and publish content responsibly for wider digital audiences.</p> <p>Key Vocabulary media, secure, filter</p>	<p>Lesson 1 To understand what a text adventure is and plan a story.</p> <p>Lesson 2 To create a story-based text adventure.</p> <p>Lesson 3 To explore map-based text adventures.</p> <p>Lesson 4 To code a map-based text adventure game.</p> <p>Prior Learning Children can create simple programs and interactive stories.</p> <p>Future Learning Children will design complex interactive systems and narrative-based games using code.</p> <p>Key Vocabulary abstraction, media, filter</p>	<p>Lesson 1 To create a picture quiz for younger users.</p> <p>Lesson 2 To use different question types in a digital quiz.</p> <p>Lesson 3 To create grammar-based quizzes.</p> <p>Lesson 4 To design quizzes based on curriculum knowledge.</p> <p>Lesson 5 To create a quiz that requires searching a database.</p> <p>Lesson 6 To design and build a quiz show game.</p> <p>Prior Learning Children can use simple digital tools to create quizzes and interactive content.</p> <p>Future Learning Children will design structured interactive systems that test, analyse and present information.</p> <p>Key Vocabulary abstraction, filter, secure</p>
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