Computing Skills and Vocabulary Progression

Year 1

Intent – aims and vocabulary

Year 1	Autumn	Vocabulary
Online Safety 4 lessons • Log in safely and understand why that is important • Create an avatar and understand what this is and how it is used • Create a picture and add their name to it • Understand the idea of 'ownership' of creative work • Save work in the 'My Work' area and understand this is a private space • Find saved work in the 'Online Work' area • Search Purple Mash to find resources • Find messages on Purple Mash • Become familiar with the types of resources available • Become more familiar with the icons used • Add pictures and text to work • Explore the 'Tools' are of Purple Mash • Identify and explain common icons (Save, Print, Open, New) • Understand the importance of logging out		Alert Saving Avatar Search Button Shared Folder Device Textbox File Name Think About Box Filter Topic Area Home Screen Tool Bar Icon Typing Login Writing Template Log out Menu My Work Area Notification Password Private Purple Mash Tools
Grouping and Sorting 2 lessons • Think logically about the steps of a process • Sort items using a range of criteria • Sort items on the computer using the 'Grouping' activities • Bring together logical thinking and the use of technology • Introduce the term 'algorithm' • Describe logically following a process		Algorithm Groups Criteria Less Than Describe More Than Equal Sort

Pictograms 3 lessons	Collect Data	Record Results
• Understand that data can be represented in picture format • Contribute to a class pictogram • Use a pictogram to record the results of an experiment	Compare Data Pictogram	Title Totals Visual

Year 1	Spring	Vocabulary

Lego Builders 3 lessons	Algorithm	Machine
• Emphasise the importance of following instructions • Follow and create simple instructions on the computer • Consider how the order of instructions affects the result	Code Computer Debugging Instructions	Program Recipe Sequence

Maze Explorers 4 lessons	Algorithm	Instruction
• Understand the functionality of the basic direction keys • Use the direction keys to complete challenges successfully • Create and debug a set of instructions • Use additional direction keys as part of an algorithm • Change and extend the algorithm list • Create a longer algorithm for an activity • Set challenges for our peers	Challenge Command Delete Direction	Left and Right Route Undo Unit

Animations 5 lessons	Animation	Font
• Understand the differences between traditional books and e-books • Explore the tools of '2Create a Story's My Simple Story level' • Save the work created • Add animation to a picture • Play the pages created • Make changes and Overwrite previously saved work • Add sound effects, created music and voice recordings to pictures • Add backgrounds to an animation	Background Category Clip-art Gallery Copy Drop-down Menu E-book Edit Eraser Features	Sound Overwrite Paint Tools Paste Play Mode Redo Save Sound Effect Text

• Demonstrate understanding of all the tools used in 2Create a story • Use copy and paste to create additional pages • Complete an animated story • Create a class display board	Undo Voice Recording

Year 1	Summer	Vocabulary	
Coding 6 lessons • Understand what instructions are • Predict what will happen when instructions are followed • Understand that computer programs work by following instructions called code • Use code to make a computer program • Understand what objects and actions are • Understand what an event is • Use an event to control an object • Understand how code executes when a program is run • Understand what backgrounds and objects are • Use the scale attribute (property) • Plan a computer game • Make a computer game		Action Algorithm Background Click Code Code Blocks Coding Code View Command Debug/Debugging Design View Event Execute	Instruction Object Output Plan Programmer Properties Run Scale Scene Software Sound When Clicked
Spreadsheets 3 lessons • Understand what a spreadsheet is • Navigate around a spreadsheet • Enter data into a spreadsheet • Learn new vocabulary related to spreadsheets • Add clipart images to a spreadsheet • Use the 'move cell' and 'lock' tools		Button Calculations Cell Clipart Column Count Tool Data Delete	Image Lock Cell Move Cell Row Select Speak Tool Spreadsheet Value

• Use the 'speak' and 'count' tools in 2calculate to count items	
Technology Outside of School 2 lessons • Find and understand examples of where technology is used in the local community • Record examples of technology outside of school	Computer Technology

Year 2

Intent – aims and vocabulary

Year 2	Autumn	Vocabulary	
Online Safety 3 lessons • Refine searches using the Search tool. • Share work electronically using the display boards. • Use digital technology to share work on Purple Mash to communicate and connect with others locally. • Have some knowledge and understanding about sharing more globally on the Internet. • Introduce Email as a communication tool using 2Respond simulations. • Understand how we talk to others when they are not there in front of us. • Open and send simple online communications in the form of email. • Understand that information put online leaves a digital footprint or trail. • Begin to think critically about the information they leave online. • Identify the steps that can be taken to keep personal data and hardware secure		Attachment Digital Footprint Display Board Email Filter Identifying Internet	Personal Information Private Information Protection Reply Search Secure Sharing

Coding 6 lessons		
• Understand what an algorithm is. • Create a computer program using an algorithm. • Create a program using a given design. • Understand the collision detection event. • Understand that algorithms follow a sequence. • Design an algorithm that follows a timed sequence. • Understand that different objects have different properties. • Understand what different events do in code. • Create a program using a given design. • Understand the function of buttons in a program. • Know what debugging means. • Understand the need to test and debug a program repeatedly. • Debug simple programs.	Action Algorithm Background Bug Button Click Events Collision Detection Collision Detection Event Command Debug/Debugging Event Execute Image Implement Interaction Interval	Object Object Name Output Predict Properties Run Scale Scene Sequence Test Text Timer Turtle Object When Clicked When Key Event When Swiped Event
Spreadsheets 4 lessons		
• Review the work done in 2Calculate in year 1. • Revise spreadsheet related vocabulary. • Use some 2Calculate tools that were introduced in year 1. • Use copying, cutting and pasting shortcuts in 2Calculate. • Total items using 2Calcuate totalling tools. • solve a simple puzzle using 2Calculate • Explore the capabilities of a spreadsheet in adding up coins to match the prices of objects • Add and edit data in a table layout. • Manually create a block graph using data.	Addition Block Graph Cell Coins Column Copy Count Tool Cut Data Drag Equals	Equals Tool Image Value Label Paste Price Row Speak Tool Table Toolbox Total

Year 2	Spring	Vocabulary	
Questioning 5 lessons • Show that the information provided on pictograms is of limited use beyond answering simple questions • Use yes/no questions to separate information • Construct a binary tree to separate different items. • Use 2Question (a binary tree) to answer questions • Use a database to answer more complex search questions. • Find information using the 'Search Tool'.		Avatar Binary Tree Data Database Field Information	Pictogram Question Record Search Sort
Effective Searching 3 lessons • Understand the terminology associated with the Internet and searching. • Gain a better understanding of searching the Internet. • Create a leaflet to help someone search for information on the Internet		Browser Device Digital Footprint Domain Internet Network	Search Engine URL Web Address Web Page Web Site World Wide Web
Creating Pictures 5 lessons • Explore 2Paint A Picture. • Look at the work of Impressionist artists • Recreate Impressionist art using the Impressionism template. • Look at the work of pointillist artists such as Seurat. • Recreate pointillist art using the Pointillism template. • Look at the work of Piet Mondrian • Recreate Piet Mondrian artwork using the Lines template. • Look at the work of William Morris • Recreate William Morris artwork using the Patterns template. • Look at some surrealist art • Create artwork using the eCollage function in 2Paint A Picture.		Art Clipart Diagonal Dilute eCollage Fill Horizontal Impressionism Line Palette	Parallel Pointillism Repeating Pattern Rotated Stamps Style Surrealism Symmetry Vertical

Year 2	Summer	Vocabulary	
Making Music 3 lessons • Be introduced to making music digitally using 2Sequence. • Explore, edit and combine sounds using 2Sequence. • Add sounds to a tune to improve it. • Think about how music can be used to express feelings • Create tunes which depict feelings. • Upload a sound from a bank of sounds into the Sounds section. • Record their own sound and upload it into the Sounds section. • Create their own tune using the sounds which they have added to the Sounds section.		Bars Beat Compose Note Tune Repeat	Sound Effect Soundtrack Speed Tempo Volume
Presenting ideas 4 lessons • Explore how a story can be presented in different ways. • Make a quiz about a story or class topic • Make a fact file on a non-fiction topic. • Make a presentation to the class.		E-Book Fact File Fiction Mind Map Multiple-Choice	Node Non-Fiction Presentation Quiz

Year 3

Intent – aims and vocabulary

Year 3	Autumn	Vocabulary	
Online Safety 3 lessons • Know what makes a safe password, • Explain how to keep passwords safe and the consequences of giving your passwords away. • Understand how the Internet can be used to help us to communicate effectively. • Understand how a blog can be used to help us communicate with a wider audience. • Consider if what can be read on websites is always true.		Appropriate Blog Inappropriate Internet Password Personal information Permission	Reliable Source Reputable Source Spoof Verify Vlogs Website

- Recognise what a 'spoof' website is. - Create a 'spoof' webpage. - Think about why these sites might exist and how to check that the information is accurate. - Learn about the meaning of age restrictions symbols on digital media and devices. - Discuss why PEGI restrictions exist. - Know where to turn for help if they see inappropriate content or have inappropriate contact from others.	
Coding 6 lessons - Review previous coding knowledge. - Understand what a flowchart is and how flowcharts are used in computer programming. - Understand that there are different types of timers. - Select the right type of timer for a purpose. - Use the repeat command. - Use coding knowledge to create a range of programs. - Understand the importance of nesting. - Design and create an interactive scene.	Action Implement Alert Input Algorithm Interval Background Nest Bug Object Button Predict Click events Properties Code Repeat Collision detection event Right-Angle Command Run Debug/Debugging Scene Degrees Sequence Event Test Flowchart Timer Turtle Object
Spreadsheets 3 lessons - Add and edit data in a table layout. - Find out how spreadsheet programs can automatically create graphs from data. - Introduce the 'more than', 'less than' and 'equals' tools. - Introduce the 'spin' tool and show how it can be used to count through times tables. - Introduce the Advanced mode of 2Calculate.	Advance Mode More Than Bar Graph More Than, Less Than & Equal tool Cell Address Pie Chart Data Quiz Tool Equals Spinner Tool Less Than Table

• Learn about describing cells using their addresses.		

Year 3	Spring	Vocabulary	
Touch-typing 4 Lessons • Introduce typing terminology. • Understand the correct way to sit at the keyboard. • Learn how to use the home, top and bottom row keys. • Practice and improve typing for home, bottom, and top rows. • Practice the keys typed with the left hand. • Practice the keys typed with the right hand		Keys Posture	Spacebar Typing
Email 6 Lessons • Think about the different methods of communication. • Open and respond to an email. • Write an email to someone from an address book. • Learn how to use email safely. • Learn how to use email safely. • Add an attachment to an email • Explore a simulated email scenario.		Address Book Attachment BCC – Blind Carbon Copy CC – Carbon Copy Communication Compose Email Inbox	Link Mind Mapping Node Password Personal Information Save to Draft Trusted Contact
Branching Databases 4 Lessons • Sort objects using just YES/NO questions. • Complete a branching database using 2Question. • Create a branching database of the children's choice		Binary Tree Branching Database Data	Database Debugging

Year 3	Summer	Vocabulary	
Simulations 3 Lessons • Find out what a simulation is and understand the purpose of simulations. • Explore a simulation, making choices and discussing their effects.		Advantages Analysis Decision	Modelling Point-Of-View Realistic

• Work through and evaluate a more complex simulation	Disadvantages Evaluation	Simulation Solution Unrealistic
Graphing 2 Lessons • Enter data into a graph and answer questions. • Investigate in order to answer a question. • Present the results in graphic form	Axis Chart Column Data Graph Investigation	Row Sorting Survey Tally Chart Title
PowerPoints 6 Lessons • Create a page in a presentation • Add media to a presentation • Add animations into a presentation • Add timings into a presentation • Design and present an effective presentation.	Animation Audio Border Properties Duration Editing Fill colour Font Formatting Layer Media Presentation Presentation Design	Preview Review Slide Slideshow Sound Effect Textbox Theme Timing Transition Video WordArt

Year 4

Intent – aims and vocabulary

Year 4	Autumn	Vocabulary	
Online Safety 4 lessons • Understand how children can protect themselves from online identity theft.		AdFly Attachment Citation	Phishing Plagiarism Ransomware

• Understand that information put online leaves a digital footprint or trail and that this can aid identity theft. • Identify the risks and benefits of installing software including apps • Understand that copying the work of others and presenting it as their own is called 'plagiarism' and to consider the consequences of plagiarism. • Identify appropriate behaviour when participating or contributing to collaborative online projects for learning. • Identify the positive and negative influences of technology on health and the environment. • Understand the importance of balancing game and screen time with other parts of their lives.	Collaborate Collaborative Database Cookies Copyright Data Analysis Digital Footprint Malware	Report SMART Rules Software Spam Virus Watermark
Coding 6 lessons • Review coding vocabulary and knowledge. • Create a simple computer program. • Begin to understand selection in computer programming. • Understand how an IF statement works. • Understand how to use coordinates in computer programming. • Understand how an IF statement works • Understand the Repeat until command. • Begin to understand selection in computer programming. • Understand how an IF/ELSE statement works. • Understand what a variable is in programming. • Use a number variable. • Review vocabulary and concepts learnt in Year 4 Coding. • Create a playable game.	Action Alert Algorithm Background Button Code Blocks Command Co-ordinates Debug/Debugging Design Event Execute Flowchart 'If' Statement 'If/Else' Statement	Input Nest Object Prompt Implement Predict Repeat Repeat Until Run Properties Selection Sequence Timer Variable
Spreadsheets 5 lessons • Explore how the numbers entered into cells can be set to either currency or decimal. • Explore the use of the display of decimal places. • Find out how to add formulae to a cell.	Average Budget Calculations Chart	Line Graph Percentage Place Value Random Number Tool

• Explore how tools can be combined to use 2Calculate to make number games. • Explore the use of the timer, random number and spin button tools • Use the line graphing tool in 2Calculate with appropriate data. • Interpret a line graph to estimate values between data readings. • Use the currency formatting tool in 2Calculate. • Use 2Calculate to create a model of a real-life situation. • Use the functions of allocating value to images in 2Calculate to make a resource to teach place value.	Column Resize Data Row Decimal Place Set Image Equals to Tool Spinner Tool Format Cell Timer Formula Totals Formula Wizard

Year 4	Spring	Vocabulary

Writing for different audiences 5 Lessons • Explore how font size and style can affect the impact of a text. • Use a simulated scenario to produce a news report. • Use a simulated scenario to write for a community campaign.	Campaign Opinion Format Reporter Font Viewpoint Genre
Logo 4 Lessons • Learn the structure of the language of 2Logo. • Input simple instructions in 2Logo • Use 2Logo to create letter shapes • Use the Repeat command in 2Logo to create shapes. • Use and build procedures in 2Logo.	Debugging Prediction Grid Procedure Logo Repeat Logo Commands Run Speed Multi Line Mode SETPC Pen Down SETPS Pen Up

Animations 3 Lessons • Decide what makes a good, animated film or cartoon • Discuss favourite animations. • Learn how animations are created by hand. • Find out how 2Animate animations can be created in a similar way using technology. • Learn about onion skinning in animation. • Add backgrounds and sounds to animations. • Introduce 'stop motion' animation. • Share animation the class blog.	Animation Onion Skinning FPS (Frame Per Second) Pause Frame Stop Motion
Year 4 Summer	Vocabulary
Effective Search 3 Lessons • Locate information on the search results page • Use search effectively to find out information • Assess whether an information source is true and reliable.	Balanced View Reliability Easter Eggs Results Page Internet Search Engine Key Words
Hardware Investigation 2 Lessons • Understand the different parts that make up a desktop computer. • Recall the different parts that make up a computer.	Components Motherboard CPU Network Card Graphics Card Output Hard Drive Peripherals Hardware RAM Input Software
Making Music 4 Lessons • Identify and discuss the main elements of music: Pulse, Rhythm, Tempo, Pitch, Texture • Understand and experiment with rhythm and tempo. • Create a melodic phrase • Compose a piece of electronic music.	BPM Pulse Dynamics Rhythm Harmonious Tempo Melody Texture Pitch Synths
Artificial Intelligence 4 Lessons • Understand the basic concept of artificial intelligence. • Identify real-life examples of artificial intelligence. • Recognise the impact of artificial intelligence in daily life.	Artificial Intelligence Data Algorithm

• Recap what is meant by the terminology artificial intelligence.
• Explore how artificial intelligence can assist and benefit us in various aspects of daily life
• Understand the potential applications and impact of AI in the future.
• Encourage critical thinking and creativity when thinking about the future of AI.
• Understand how artificial intelligence is being used to create music and art.
• Use artificial intelligence to create music and art.

Year 5

Intent – aims and vocabulary

Year 5	Autumn	Vocabulary	
Online Safety 4 lessons • Gain a greater understanding of the impact that sharing digital content can have. • Review sources of support when using technology. • Review children' responsibility to one another in their online behaviour. • Know how to maintain secure passwords. • Understand the advantages, disadvantages, permissions, and purposes of altering an image digitally and the reasons for this. • Be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online. • Learn about how to reference sources in their work. • Search the Internet with a consideration for the reliability of the results of sources to check validity and understand the impact of incorrect information. • Ensure reliability through using different methods of communication.		Appropriate Avatar Bibliography Citation Collaborate Communication Copyright Creative Commons Licence Critical Thinking Digital Footprint Encrypt Identity Theft Image Manipulation Malware	Ownership PEGI Ratings Phishing Password Personal Information Plagiarism Reference Reliability Responsibility Reliable Source Screenshot SMART Rules Spoof Validity

Coding 6 lessons	Vocabulary	
- Review existing coding knowledge. - Begin to be able to simplify code. - Create a playable game. - Understand what a simulation is. - Program a simulation using 2Code. - Know what decomposition and abstraction are in Computer Science. - Take a real-life situation, decompose it and think about the level of abstraction. - Use decomposition to make a plan of a real-life situation. - Understand how to use friction in code. - Begin to understand what a function is and how functions work in code. - Understand what the different variable types are and how they are used differently. - Understand how to create a string. - Begin to explore text variables when coding. - Understand what concatenation is and how it works.	Abstraction Action Algorithm Command Concatenation Co-ordinates Debug/Debugging Decomposition Efficient Event Flowchart Friction Function Input Nest Object	Output Physical System Predict Print to Screen Properties Random Repeat Selection Sequence Simplify Simulation String Tabs Timer Variable
Spreadsheets 5 lessons		
- Use formulae within a spreadsheet to convert measurements of length and distance. - Use the count tool to answer hypotheses about common letters in use. - Use a spreadsheet to model a real-life problem. - Use formulae to calculate area and perimeter of shapes. - Create formulae that use text variables - Use a spreadsheet to help plan a school cake sale.	Advance Mode Area Budget Columns Computational Model Data Format Cell Formula Formula Bar	Formula Wizard 'How Many?' Tool Perimeter Profit Rows Spreadsheet Totalling Tool Variable
Year 5	Spring	Vocabulary

Databases 4 Lessons • Learn how to search for information in a database. • Contribute to a class database. • Create a database around a chosen topic.	Arrange Database Avatar Database Report Chart Field Collaborative Group Data
Game Creator 5 Lessons • Introduce the 2DIY 3D tool. • Begin planning a game. • Design the game environment. • Design the game quest to make it a playable game. • Finish and share the game. • Self - and peer - evaluate.	Evaluation Quest Feedback Scene Image Screenshot Instructions Texture Promotion Theme
3D Modelling 4 Lessons • Be introduced to the 2Design and Make tool. • Explore the effect of moving points when designing. • Design a 3D model to fit certain criteria. • Refine and print a model.	2D Net 3D Pattern Fill 3D Printing Points CAD – Computer Aided Design Design Brief Template

Year 5	Summer	Vocabulary

Concept Maps 4 Lessons • Understand the need for visual representation when generating and discussing complex ideas. • Understand the uses of a 'concept map'. • Understand and use the correct vocabulary when creating a concept map. • Create a concept map. • Create a collaborative concept map and present this to an audience.	Concept Sub-Heading Concept Map Node Connection Presentation Mode Collaborate Story Mode Heading

Word Processing 8 Lessons		
• Know what a word processing tool is for. • Add and edit images to a word document. • Know how to use word wrap with images and text. • Change the look of text within a document. • Add features to a document to enhance its look and usability. • Use tables within MS Word to present information • Introduce children to templates. • Consider page layout including heading and columns.	Attributing Bulleted Lists Breaks Caps Lock Captions Column (table) Columns (newspaper) Copy and Paste Copyright Creative Commons Cropping Cursor Distributing Columns Document Drop Capitals Editor Options Font Front Screen Grammar Check Hyperlink	Image Editing Image Transparency Merge Cells Numbered Lists Page Orientation Readability Row Selecting/Highlighting Sharing Spell Check Styles Template Text Box Text Formatting Text Wrapping Word Art Word Processing Tool Zoom
Using External Devices – Purple Chip 6 Lessons		
• Understand what Purple Chip is. • Upload a program to an external device. • Adapt a program and operate it using Purple Chip • Understand how a device can be programmed to be used as a game controller. • Explore the text functions available and appraise their uses. • Create a simple quiz program that can be answered using an external device. • Create a program in which an external device can be used to monitor real world conditions. • Design a program for the Purple Chip • Code, test, debug and share a program for the Purple Chip	Alert Algorithm Chip Show Text Code View Debug Design Design View Emulator/Simulator Event External Device	Host If/Else Input Output Print to Screen QR Code Sensor URL Variable Design

	Function

Year 6

Intent – aims and vocabulary

Year 6	Autumn	Vocabulary	
Online Safety 3 lessons • 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. • 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. • Have a clear idea of appropriate online behaviour and how this can protect themselves and others from possible online dangers, bullying and inappropriate behaviour. • Begin to understand how information online can persist and give away details of those who share or modify it • 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. • Identify the positive and negative influences of technology on health and the environment.	Data Analysis Digital Footprint Inappropriate Location Sharing Password PEGI Rating	Phishing Print Screen Screen Time Secure Websites Spoof	

Coding 6 lessons	Action	Output
• Design a playable game with a timer and a score. • Plan and use selection and variables. • Understand how the launch command works • Use functions and understand why they are useful. • Understand how functions are created and called. • Use flowcharts to test and debug a program. • Create a simulation of a room in which devices can be controlled. • Understand the different options of generating user input in 2Code. • Understand how user input can be used in a program. • Understand how 2Code can be used to make a text-based adventure game.	Algorithm Command Concatenation Co-ordinates Debug/Debugging Decomposition Event Execute/Run Flowchart Function Input Launch Command Object X and y properties	Predict Procedure Properties Repeat Repeat Until Selection Sequence Simulation String Tabs Text Object Timer Turtle Object Variable
Spreadsheets 5 lessons • Use a spreadsheet to investigate the probability of the results of throwing many dice. • Use a spreadsheet to calculate the discount and final prices in a sale. • Create a formula to help work out the prices of items in the sale. • Use a spreadsheet to plan how to spend pocket money and the effect of saving money. • Use a spreadsheet to plan a school charity day to maximise the money donated to charity	Advanced Mode Budget Chart Columns Count(How Many?) Tool Data Dice Tool Expense Format Cell	Formula Formula Bar Formula Wizard Move Cell Tool Percentage Profit Rows Spreadsheet
Year 6	Spring	Vocabulary

Blogging 4 Lessons • Identify the purpose of writing a blog. • Identify the features of successful blog writing • Plan the theme and content for a blog. • Understand how to write a blog and a blog post. • Consider the effect upon the audience of changing the visual properties of the blog. • Understand how to contribute to an existing blog. • Understand the importance of commenting on blogs. • Peer-assess blogs against the agreed success criteria. • Understand how and why blog posts and comments are approved by the teacher.	Approval Commenting Archive Connections Blog Nodes Blog Post Vlog Collaborate
Text Adventures 4 Lessons • Find out what a text-based adventure game is • Explore an example made in 2Create a Story. • Use 2Connect to plan a 'Choose your own Adventure' type story. • Use 2Connect plans for a story adventure to make the adventure using 2Create a Story. • Read and understand given code for a text adventure game. • Debug a text adventure. • Design and implement improvements to a text adventure game.	Debug/Debugging Selection Flow of Control Sprite Function Step Through Link Text Adventure QR Code Variables Repeat
Networks 3 Lessons • Discover what the children know about the Internet. • Find out what a LAN and WAN are. • Find out how we access the internet in school. • Research and find out about the age of the internet. • Think about what the future might hold.	Data Router DNS (Domain Name Server) Search Engine Ethernet WAN (Wide Area Network) Hosting Web Page Hub/Switch Web Server Internet Website IP Address WLAN (Wireless Local Area Network) ISP (Internet Service Provider) Wi-Fi LAN (Local Area Network) World Wide Web Network
Year 6 Summer	Vocabulary

Quizzing 6 Lessons • Create a picture-based quiz for young children. • Use the question types within 2Quiz. • Explore the grammar quizzes • Make a quiz that requires the player to search a database. • Make a quiz to test your teachers or parents.	Audience Audio Case-Sensitive Clipart Clone Cloze Copy/Paste Database Database Record	Database Field Image Image Filter Selfie Statistics Undo/Redo Preview Quiz
Understanding Binary 4 Lessons • Examine how whole numbers are used as the basis for representing all types of data in digital systems. • Recognise that digital systems represent all types of data using number codes that ultimately are patterns of 1s and 0s (called binary digits, which is why they are called digital systems). • Understand that binary represents numbers using 1s and 0s and these represent the on and off electrical states respectively in hardware and robotics. • Recognise that the numbers 0, 1, 2 and 3 could be represented by the patterns of two binary digits of 00, 01, 10 and 11 • Represent whole numbers in binary, for example counting in binary from zero to 15, or writing a friend's age in binary • Explore how division by two can be used as a technique to determine the binary representation of any whole number by collecting remainder terms. • Represent the state of an object in a game as active or inactive using the respective binary values of 1 or 0.	Binary Bit Byte Decimal Denary Digit Game States Gigabyte	Integer Kilobyte Megabyte Microprocessor Nanotechnology Nibble Switch Terabyte Transistor Variable
Spreadsheets (with Microsoft Excel) 8 Lessons • know what a spreadsheet looks like. • Navigate and enter data into cells. • Introduce some basic data formulae in Excel. • Demonstrate how the use of Excel can save time and effort when performing calculations • Use a spreadsheet to model a situation. • Demonstrate how Excel can make complex data clear by manipulating the way it is presented.	Auto Fit Average Budget Calculation Categories Ribbon Cell Cell Reference	Formula Formula Bar Graph Horizontal Axis Maximum Minimum Profit

• Use formulae for percentages, averages, max and min in spreadsheets. • Create a variety of graphs in Excel. • Use a spreadsheet to model a real-life situation • Apply spreadsheet skills to solving problems	Chart Column Computational Model Conditional Formatting Currency Data Delimiter Expense Filter Flash-fill Formatting	Range Row Series Sheet Sorting Spreadsheet Template Text Wrapping Vertical Axis Workbook