



Deeping St James Computing Progression of Knowledge and Skills



Year	Unit Number	Unit Title	Lesson	Lesson Title	Aims
1	1.1	Online Safety & Exploring Purple Mash	1	Safe Logins	<ul style="list-style-type: none"> • To log in safely and understand why that is important. • To create an avatar and to understand what this is and how it is used. • To be able to create a picture and add their own name to it. • To start to understand the idea of 'ownership' of creative work. • To save work to the My Work area and understand that this is private space.
1	1.1	Online Safety & Exploring Purple Mash	2	My Work Area	<ul style="list-style-type: none"> • To learn how to find saved work in the Online Work area. • To learn about what the teacher has access to in Purple Mash. • To learn how to see messages left by the teacher on their work. • To learn how to search Purple Mash to find resources.
1	1.1	Online Safety & Exploring Purple Mash	3	Purple Mash Topics	<ul style="list-style-type: none"> • 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 Topics section. • To start to add pictures and text to work
1	1.1	Online Safety & Exploring Purple Mash	4	Purple Mash Tools	<ul style="list-style-type: none"> • To explore the Tools area of Purple Mash and to learn about the common icons used in Purple Mash for Save, Print, Open, New. • To explore the Games area on Purple Mash. • To understand the importance of logging out when they have finished
1	1.2	Grouping & Sorting	1	Sorting Away from the Computer	To sort items using a range of criteria.
1	1.2	Grouping & Sorting	2	Sorting on the Computer	To sort items on the computer using the 'Grouping' activities in Purple Mash.

1	1.3	Pictograms	1	Data in Pictures	To understand that data can be represented in picture format.
1	1.3	Pictograms	2	Class Pictogram	To contribute to a class pictogram.
1	1.3	Pictograms	3	Recording Results	To use a pictogram to record the results of an experiment.
1	1.4	Lego Builders	1	Following Instructions	To emphasise the importance of following instructions.
1	1.4	Lego Builders	2	Following and Creating Simple Instructions on the Computer	To follow and create simple instructions on the computer.
1	1.4	Lego Builders	3	To consider how the order of instructions affects the result.	To consider how the order of instructions affects the result.
1	1.5	Maze Explorers	1	Challenges 1 and 2	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.
1	1.5	Maze Explorers	2	Challenges 3 and 4	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).
1	1.5	Maze Explorers	3	Challenges 5 and 6	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.
1	1.5	Maze Explorers	4	Setting More Challenges	To provide an opportunity for the children to set challenges for each other. To provide an opportunity for the teacher to add these challenges to a display board for the class to try.

1	1.6	Animated Story Books	1	Drawing and Creating	To understand the differences between traditional books and e-books. To explore the tools of 2Create a Story's My Simple Story level. To save the page they have created.
1	1.6	Animated Story Books	2	Animation	To add animation to a picture. To play the pages created so far. To save the additional changes and overwrite the file.
1	1.6	Animated Story Books	3	Sounds and More!	To add a sound effect to a picture. To add a voice recording to the picture. To add created music to the picture.
1	1.6	Animated Story Books	4	Making a Story	To add a background to the story. To demonstrate a good understanding of all the tools they have used in 2Create a Story and use these successfully to create their own story.
1	1.6	Animated Story Books	5	Copy and Paste	To use the copy and paste feature to create additional pages. To continue and complete an animated story. To create a class display board of the story books created by the class
1	1.7	Coding	1	Instructions	To understand what instructions are. To predict what will happen when instructions are followed. To understand that computer programs work by following instructions called code.
1	1.7	Coding	2	Objects and Actions	To use code to make a computer program. To understand what objects and actions are.

1	1.7	Coding	3	Events	To understand what an event is. To use an event to control an object.
1	1.7	Coding	4	When Code Executes	To understand what an event is. To begin to understand how code executes when a program is run.
1	1.7	Coding	5	Setting the Scene	To understand what backgrounds and objects are. To understand how to use the scale property.
1	1.7	Coding	6	Using a Plan	To plan a computer program. To make a computer program.
1	1.8	Spreadsheets	1	Introduction to Spreadsheets	To understand what a spreadsheet looks like. To be able to navigate around a spread sheet and enter data. To learn new vocabulary related to spreadsheets.
1	1.8	Spreadsheets	2	Adding Images to a Spreadsheet and Using the Image Toolbox	To add clipart images to a spreadsheet. To use the 'move cell' and 'lock' tools.
1	1.8	Spreadsheets	3	Using the 'Speak' and 'Count' Tools in 2Calculate to Count Items	To use the 'speak' and 'count' tools in 2Calculate to count items.
1	1.9	Technology outside school	1	What is Technology?	To find and understand examples of where technology is used in the local community
1	1.9	Technology outside school	2	Technology outside school.	To record examples of technology outside school.
2	2.1	Coding	1	Algorithms	To understand what an algorithm is. To create a computer program using an algorithm.

2	2.1	Coding	2	Collision Detection	To create a program using a given design. To understand the collision detection event.
2	2.1	Coding	3	Using a Timer	To understand that algorithms follow a sequence. To design an algorithm that follows a timed sequence.
2	2.1	Coding	4	Different Object Types	To understand that different objects have different properties. To understand what different events do in code.
2	2.1	Coding	5	Buttons	To create a program using a given design. To understand the function of buttons in a program.
2	2.1	Coding	6	'Smelly Code' Debugging	To know what debugging means. To understand the need to test and debug a program repeatedly. To debug simple programs.
2	2.2	Online Safety	1	Searching and Sharing	To know how to refine searches using the Search tool. To know how to share work electronically using the display boards. To use digital technology to share work on Purple Mash to communicate and connect with others locally. To have some knowledge and understanding about sharing more globally on the Internet.
2	2.2	Online Safety	2	Email using 2Respond	To introduce Email as a communication tool using 2Respond simulations. To understand how we talk to others when they are not there in front of us. To open and send simple online communications in the form of email.
2	2.2	Online Safety	3	Digital Footprint	To understand that information put online leaves a digital footprint or trail. To begin to think critically about the information they leave online. To identify the steps that can be taken to keep personal data and hardware secure

2	2.3	Spreadsheets	1	Reviewing the Use of Spreadsheets	To review the work done in 2Calculate in year 1. To revise spreadsheet related vocabulary. To use some 2Calculate tools that were introduced in year 1.
2	2.3	Spreadsheets	2	Copying, Cutting and Pasting Totals	To use copying, cutting and pasting shortcuts in 2Calculate. To use 2Calculate totalling tools. To use 2Calculate to solve a simple puzzle
2	2.3	Spreadsheets	3	Using a Spreadsheet to Add Amounts	To explore the capabilities of a spreadsheet in adding up coins to match the prices of objects
2	2.3	Spreadsheets	4	Creating a Table and Block Graph	To add and edit data in a table layout. To use the data to manually create a block graph.
2	2.4	Questioning	1	Using and Creating Pictograms	To show that the information provided on pictograms is of limited use beyond answering simple questions
2	2.4	Questioning	2	Asking Yes / No Questions	To use yes/no questions to separate information
2	2.4	Questioning	3	Binary Trees	To construct a binary tree to separate different items.
2	2.4	Questioning	4	Using 2Question	Use 2Question (a binary tree) to answer questions
2	2.4	Questioning	5	Using 2Investigate: a Non-Binary Database	To use a database to answer more complex search questions. To use the Search tool to find information.
2	2.5	Effective Searching	1	Understanding the Internet and Searching	To understand the terminology associated with the Internet and searching.
2	2.5	Effective Searching	2	Searching the Internet	To gain a better understanding of searching the Internet.
2	2.5	Effective Searching	3	Sharing Knowledge of the Internet and Effective Searching	To create a leaflet to help someone search for information on the Internet.

2	2.6	Creating Pictures	1	Introduction and Impressionism	To explore 2Paint A Picture. To look at the work of Impressionist artists and recreate them using the Impressionism template.
2	2.6	Creating Pictures	2	Pointillist Art	To look at the work of pointillist artists such as Seurat. To recreate pointillist art using the Pointillism template.
2	2.6	Creating Pictures	3	Piet Mondrian	To look at the work of Piet Mondrian and recreate it using the Lines template.
2	2.6	Creating Pictures	4	William Morris and Pattern	To look at the work of William Morris and recreate it using the Patterns template.
2	2.6	Creating Pictures	5	Surrealism and eCollage	To look at some surrealist art and create your own using the eCollage function in 2Paint A Picture.
2	2.7	Making Music	1	Introducing 2Sequence	To be introduced to making music digitally using 2Sequence. To explore, edit and combine sounds using 2Sequence.
2	2.7	Making Music	2	Making Music	To add sounds to a tune to improve it. To think about how music can be used to express feelings and create tunes which depict feelings.
2	2.7	Making Music	3	Soundtracks	To upload a sound from a bank of sounds into the Sounds section. To record their own sound and upload it into the Sounds section. To create their own tune using the sounds which they have added to the Sounds section.
2	2.8	Presenting Ideas	1	Presenting a Story Three Ways	To explore how a story can be presented in different ways.
2	2.8	Presenting Ideas	2	Presenting Ideas as a Quiz	To make a quiz about a story or class topic.
2	2.8	Presenting Ideas	3	Making a Non-Fiction Fact File	To make a fact file on a non-fiction topic.
2	2.8	Presenting Ideas	4	Making a Presentation	To make a presentation to the class.
3	3.1	Coding	1	Using Flowcharts	To review previous coding knowledge. To understand what a flowchart is and how flowcharts are used in computer programming.

3	3.1	Coding	2	Using Timers	To understand that there are different types of timers. To be able to select the right type of timer for a purpose.
3	3.1	Coding	3	Using Repeat	To understand how to use the repeat command.
3	3.1	Coding	4	Code, Test and Debug	To use coding knowledge to create a range of programs. To understand the importance of nesting.
3	3.1	Coding	5	Design and Make an Interactive Scene	To design and create an interactive scene.
3	3.1	Coding	6	Design and Make an Interactive Scene	To design and create an interactive scene.
3	3.2	Online Safety	1	Safety in Numbers	To know what makes a safe password, how to keep passwords safe and the consequences of giving your passwords away. To understand how the Internet can be used to help us to communicate effectively. To understand how a blog can be used to help us communicate with a wider audience.
3	3.2	Online Safety	2	Fact or Fiction?	To consider if what can be read on websites is always true. To look at a 'spoof' website. To create a 'spoof' webpage. To think about why these sites might exist and how to check that the information is accurate.
3	3.2	Online Safety	3	Appropriate Content & Ratings	To learn about the meaning of age restrictions symbols on digital media and devices. To discuss why PEGI restrictions exist. To know where to turn for help if they see inappropriate content or have inappropriate contact from others.
3	3.3	Spreadsheets	1	Creating Pie Charts and Bar Graphs	To add and edit data in a table layout. To find out how spreadsheet programs can automatically create graphs from data.

3	3.3	Spreadsheets	2	Using more than and Spin Button Tools	To introduce the 'more than', 'less than' and 'equals' tools. To introduce the 'spin' tool and show how it can be used to count through times tables.
3	3.3	Spreadsheets	3	Advanced Mode and Cell Addresses	To introduce the Advanced mode of 2Calculate. To learn about describing cells using their addresses.
3	3.4	Touch Typing	1	Home, Top and Bottom Row Keys	To introduce typing terminology. To understand the correct way to sit at the keyboard. To learn how to use the home, top and bottom row keys.
3	3.4	Touch Typing	2	Home, Top and Bottom Row Keys (Consolidation)	To practice and improve typing for home, bottom, and top rows.
3	3.4	Touch Typing	3	Left Keys	To practice the keys typed with the left hand.
3	3.4	Touch Typing	4	Right Keys	To practice the keys typed with the right hand.
3	3.5	Email	1	Communication	To think about the different methods of communication.
3	3.5	Email	2	Composing Emails	To open and respond to an email. To write an email to someone from an address book.
3	3.5	Email	3	Using Email Safely: Part 1	To learn how to use email safely.
3	3.5	Email	4	Using Email Safely: Part 2	To learn how to use email safely.
3	3.5	Email	5	Attachments	To add an attachment to an email.
3	3.5	Email	6	Email Simulations	To explore a simulated email scenario.
3	3.6	Branching Databases	1	Introducing Databases	To sort objects using just YES/NO questions.
3	3.6	Branching Databases	2	Branching Databases	To complete a branching database using 2Question.

3	3.6	Branching Databases	3	Creating a Branching Database on the Computer	To create a branching database of the children's choice.
3	3.6	Branching Databases	4	Creating a Branching Database on the Computer	To create a branching database of the children's choice.
3	3.7	Simulations	1	What Are Simulations?	To find out what a simulation is and understand the purpose of simulations.
3	3.7	Simulations	2	Exploring a Simulation	To explore a simulation, making choices and discussing their effects.
3	3.7	Simulations	3	Analysing and Evaluating a Simulation	To work through and evaluate a more complex simulation.
3	3.8	Graphing	1	Introducing 2Graph	<ul style="list-style-type: none"> To enter data into a graph and answer questions.
3	3.8	Graphing	2	Using 2Graph to Solve an Investigation	<ul style="list-style-type: none"> To solve an investigation and present the results in graphic form.
3	3.9	Presenting (MS PowerPoint - Desktop version)	1	Making a Presentation from a Blank Page	<ul style="list-style-type: none"> To create a page in a presentation.
3	3.9	Presenting (MS PowerPoint - Desktop version)	2	Adding Media	<ul style="list-style-type: none"> To add media to a presentation
3	3.9	Presenting (MS PowerPoint - Desktop version)	3	Adding Animation	<ul style="list-style-type: none"> To add animations into a presentation
3	3.9	Presenting (MS PowerPoint - Desktop version)	4	Presenting with Timings	<ul style="list-style-type: none"> To add timings into a presentation.
3	3.9	Presenting (MS PowerPoint - Desktop version)	5	Create a Presentation	<ul style="list-style-type: none"> To use the skills learnt in previous weeks to design and present an effective presentation.

3	3.9	Presenting (MS PowerPoint - Desktop version)	6	Create a Presentation	<ul style="list-style-type: none"> • To use the skills learnt in previous weeks to design and present an effective presentation.
3	3.9	Presenting (MS PowerPoint - Online version)	1	Making a Presentation from a Blank Page	<ul style="list-style-type: none"> • To create a page in a presentation.
3	3.9	Presenting (MS PowerPoint - Online version)	2	Adding Media	<ul style="list-style-type: none"> • To add media to a presentation
3	3.9	Presenting (MS PowerPoint - Online version)	3	Adding Animation	<ul style="list-style-type: none"> • To add animations into a presentation
3	3.9	Presenting (MS PowerPoint - Online version)	4	Create a Presentation	<ul style="list-style-type: none"> • To use the skills learnt in previous weeks to design and present an effective presentation.
3	3.9	Presenting (MS PowerPoint - Online version)	5	Create a Presentation	<ul style="list-style-type: none"> • To use the skills learnt in previous weeks to design and present an effective presentation.
3	3.9	Presenting (Google Slides - Online version)	1	Making a Presentation from a Blank Page	<ul style="list-style-type: none"> • To create a page in a presentation.
3	3.9	Presenting (Google Slides - Online version)	2	Adding Media	<ul style="list-style-type: none"> • To add media to a presentation
3	3.9	Presenting (Google Slides - Online version)	3	Adding Shapes and Lines	<ul style="list-style-type: none"> • To add shapes and lines to a presentation.
3	3.9	Presenting (Google Slides - Online version)	4	Adding Animation	<ul style="list-style-type: none"> • To add animations into a presentation.
3	3.9	Presenting (Google Slides - Online version)	5	Create a Presentation	<ul style="list-style-type: none"> • To use the skills learnt in previous weeks to design and present an effective presentation.
3	3.9	Presenting (Google Slides - Online version)	6	Create a Presentation	<ul style="list-style-type: none"> • To use the skills learnt in previous weeks to design and present an effective presentation.
3	3.9	Presenting (Google Slides - App version)	1	Making a Presentation from a Blank Page	<ul style="list-style-type: none"> • To create a page in a presentation.
3	3.9	Presenting (Google Slides - App version)	2	Adding Images	<ul style="list-style-type: none"> • To add images to a presentation.

3	3.9	Presenting (Google Slides - App version)	3	Adding Shapes and Lines	<ul style="list-style-type: none"> To add shapes and lines to a presentation.
3	3.9	Presenting (Google Slides - App version)	4	Create a Presentation	<ul style="list-style-type: none"> To use the skills learnt in previous weeks to design and present an effective presentation.
3	3.9	Presenting (Google Slides - App version)	5	Create a Presentation	<ul style="list-style-type: none"> To use the skills learnt in previous weeks to design and present an effective presentation.
4	4.1	Coding	1	Design, Code, Test and Debug	<ul style="list-style-type: none"> To review coding vocabulary and knowledge. To create a simple computer program.
4	4.1	Coding	2	IF Statements	<ul style="list-style-type: none"> To begin to understand selection in computer programming. To understand how an IF statement works.
4	4.1	Coding	3	Co-ordinates	<ul style="list-style-type: none"> To understand how to use co-ordinates in computer programming. To understand how an IF statement works.
4	4.1	Coding	4	Repeat Until and IF/ELSE Statements	<ul style="list-style-type: none"> To understand the Repeat until command. To begin to understand selection in computer programming. To understand how an IF/ELSE statement works.
4	4.1	Coding	5	Number Variables	<ul style="list-style-type: none"> To understand what a variable is in programming. To use a number variable.
4	4.1	Coding	6	Making a Playable Game	<ul style="list-style-type: none"> To review vocabulary and concepts learnt in Year 4 Coding. To create a playable game.
4	4.2	Online Safety	1	Going Phishing	<ul style="list-style-type: none"> To understand how children can protect themselves from online identity theft. To understand that information put online leaves a digital footprint or trail and that this can aid identity theft.
4	4.2	Online Safety	2	Beware Malware	<ul style="list-style-type: none"> To identify the risks and benefits of installing software including apps.

4	4.2	Online Safety	3	Plagiarism	<ul style="list-style-type: none"> • 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.
4	4.2	Online Safety	4	Healthy Screen-Time	<ul style="list-style-type: none"> • To identify the positive and negative influences of technology on health and the environment. • To understand the importance of balancing game and screen time with other parts of their lives.
4	4.3	Spreadsheets	1	Formula Wizard and Formatting Cells	<ul style="list-style-type: none"> • To explore how the numbers entered into cells can be set to either currency or decimal. • To explore the use of the display of decimal places. • To find out how to add formulae to a cell.
4	4.3	Spreadsheets	2	Using the Timer and Spin Buttons	<ul style="list-style-type: none"> • To explore how tools can be combined to use 2Calculate to make number games. • To explore the use of the timer, random number and spin button tools.
4	4.3	Spreadsheets	3	Line Graphs	<ul style="list-style-type: none"> • To use the line graphing tool in 2Calculate with appropriate data. • To interpret a line graph to estimate values between data readings.
4	4.3	Spreadsheets	4	Using a Spreadsheet for Budgeting	<ul style="list-style-type: none"> • To use the currency formatting tool in 2Calculate. • To use 2Calculate to create a model of a real-life situation.
4	4.3	Spreadsheets	5	Exploring Place Value with a Spreadsheet	<ul style="list-style-type: none"> • To use the functions of allocating value to images in 2Calculate to make a resource to teach place value.
4	4.4	Writing for Different Audiences	1	Font Styles	<ul style="list-style-type: none"> • To explore how font size and style can affect the impact of a text.

4	4.4	Writing for Different Audiences	2	Using a Simulated Scenario to Produce a News Report	<ul style="list-style-type: none"> • To use a simulated scenario to produce a news report.
4	4.4	Writing for Different Audiences	3	Using a Simulated Scenario to Produce a News Report	<ul style="list-style-type: none"> • To use a simulated scenario to produce a news report.
4	4.4	Writing for Different Audiences	4	Writing for a Campaign	<ul style="list-style-type: none"> • To use a simulated scenario to write for a community campaign.
4	4.4	Writing for Different Audiences	5	Writing for a Campaign	<ul style="list-style-type: none"> • To use a simulated scenario to write for a community campaign.
4	4.5	Logo	1	Introduction to 2Logo	<ul style="list-style-type: none"> • To learn the structure of the language of 2Logo. • To input simple instructions in 2Logo
4	4.5	Logo	2	Creating Letters using Logo	<ul style="list-style-type: none"> • To use 2Logo to create letter shapes.
4	4.5	Logo	3	Using the 'Repeat' Command in 2Logo	<ul style="list-style-type: none"> • To use the Repeat command in 2Logo to create shapes.
4	4.5	Logo	4	Using Procedures	<ul style="list-style-type: none"> • To use and build procedures in 2Logo.
4	4.6	Animation	1	Animating an Object	<ul style="list-style-type: none"> • To decide what makes a good, animated film or cartoon and discuss favourite animations. • To learn how animations are created by hand. • To find out how 2Animate animations can be created in a similar way using technology.
4	4.6	Animation	2	2Animate Tools	<ul style="list-style-type: none"> • To learn about onion skinning in animation. • To add backgrounds and sounds to animations.
4	4.6	Animation	3	Stop Motion Animation	<ul style="list-style-type: none"> • Introducing 'stop motion' animation. • To share animation the class blog.
4	4.7	Effective Searching	1	Using a Search Engine	<ul style="list-style-type: none"> • To locate information on the search results page.

4	4.7	Effective Searching	2	Use Search Effectively to Answer Questions	<ul style="list-style-type: none"> • To use search effectively to find out information.
4	4.7	Effective Searching	3	Reliable Information Sources	<ul style="list-style-type: none"> • To assess whether an information source is true and reliable.
4	4.8	Hardware Investigators	1	Hardware	<ul style="list-style-type: none"> • To understand the different parts that make up a desktop computer.
4	4.8	Hardware Investigators	2	Parts of a Computer	<ul style="list-style-type: none"> • To recall the different parts that make up a computer.
4	4.9	Making Music	1	Understanding Music	<ul style="list-style-type: none"> • To identify and discuss the main elements of music: Pulse, Rhythm, Tempo, Pitch, Texture
4	4.9	Making Music	2	Rhythm and Tempo	<ul style="list-style-type: none"> • To understand and experiment with rhythm and tempo.
4	4.9	Making Music	3	Melody and Pitch	<ul style="list-style-type: none"> • To create a melodic phrase.
4	4.9	Making Music	4	Creating Music	<ul style="list-style-type: none"> • To compose a piece of electronic music.
5	5.1	Coding	1	Coding Efficiently	<ul style="list-style-type: none"> • To review existing coding knowledge. • To be able to simplify code. • To create a playable game.
5	5.1	Coding	2	Simulating a Physical System	<ul style="list-style-type: none"> • To understand what a simulation is. • To program a simulation using 2Code.
5	5.1	Coding	3	Decomposition and Abstraction	<ul style="list-style-type: none"> • To know what decomposition and abstraction are in Computer Science. • To take a real-life situation, decompose it and think about the level of abstraction. • To use decomposition to make a plan of a real-life situation.
5	5.1	Coding	4	Friction and Functions	<ul style="list-style-type: none"> • To understand how to use friction in code. • To begin to understand what a function is and how functions work in code.
5	5.1	Coding	5	Introducing Strings	<ul style="list-style-type: none"> • To understand what the different variable types are and how they are used differently. • To understand how to create a string.

5	5.1	Coding	6	Text Variables and Concatenation	<ul style="list-style-type: none"> •To begin to explore text variables when coding. •To understand what concatenation is and how it works.
5	5.2	Online Safety	1	Responsibilities and Support when Online	<ul style="list-style-type: none"> •To gain a greater understanding of the impact that sharing digital content can have. •To review sources of support when using technology. •To review children' responsibility to one another in their online behaviour.
5	5.2	Online Safety	2	Protecting Privacy	<ul style="list-style-type: none"> •To know how to maintain secure passwords. •To understand the advantages, disadvantages, permissions, and purposes of altering an image digitally and the reasons for this. •To be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online.
5	5.2	Online Safety	3	Citing Sources	<ul style="list-style-type: none"> •To learn about how to reference sources in their work. •To search the Internet with a consideration for the reliability of the results of sources to check validity and understand the impact of incorrect information.
5	5.2	Online Safety	4	Reliability	<ul style="list-style-type: none"> •Ensuring reliability through using different methods of communication.
5	5.3	Spreadsheets	1	Conversions of Measurements	<ul style="list-style-type: none"> •To use formulae within a spreadsheet to convert measurements of length and distance.
5	5.3	Spreadsheets	2	The Count Tool	<ul style="list-style-type: none"> •To use the count tool to answer hypotheses about common letters in use.
5	5.3	Spreadsheets	3	Formulae Including the Advanced Mode	<ul style="list-style-type: none"> •To use a spreadsheet to model a real-life problem. •To use formulae to calculate area and perimeter of shapes.
5	5.3	Spreadsheets	4	Using Text Variables to Perform Calculations	<ul style="list-style-type: none"> •To create formulae that use text variables.

5	5.3	Spreadsheets	5	Event Planning with a Spreadsheet	<ul style="list-style-type: none"> To use a spreadsheet to help plan a school cake sale.
5	5.4	Databases	1	Searching a Database	To learn how to search for information in a database.
5	5.4	Databases	2	Creating a Class Database	<ul style="list-style-type: none"> To contribute to a class database.
5	5.4	Databases	3	Creating a Topic Database	To create a database around a chosen topic.
5	5.4	Databases	4	Creating a Topic Database	To create a database around a chosen topic.
5	5.5	Game Creator	1	Setting the scene.	<ul style="list-style-type: none"> To introduce the 2DIY 3D tool. To begin planning a game.
5	5.5	Game Creator	2	Creating the Game Environment	<ul style="list-style-type: none"> To design the game environment.
5	5.5	Game Creator	3	The Game Quest	<ul style="list-style-type: none"> To design the game quest to make it a playable game.
5	5.5	Game Creator	4	Finishing and Sharing	<ul style="list-style-type: none"> To finish and share the game.
5	5.5	Game Creator	5	Evaluation	<ul style="list-style-type: none"> To self- and peer-evaluate.
5	5.6	3D Modelling	1	Introducing 2Design and Make	<ul style="list-style-type: none"> To be introduced to the 2Design and Make tool.
5	5.6	3D Modelling	2	Moving Points	<ul style="list-style-type: none"> To explore the effect of moving points when designing.
5	5.6	3D Modelling	3	Designing for a Purpose	<ul style="list-style-type: none"> To design a 3D model to fit certain criteria.
5	5.6	3D Modelling	4	Printing and Making	<ul style="list-style-type: none"> To refine and print a model.
5	5.7	Concept Maps	1	Introduction to Concept Mapping	<ul style="list-style-type: none"> To understand the need for visual representation when generating and discussing complex ideas. To understand the uses of a 'concept map'.

5	5.7	Concept Maps	2	Using 2Connect	<ul style="list-style-type: none"> To understand and use the correct vocabulary when creating a concept map. To create a concept map.
5	5.7	Concept Maps	3	2Connect Story Mode	To understand how a concept map can be used to retell stories and information.
5	5.7	Concept Maps	4	Collaborative Concept Maps	To create a collaborative concept map and present this to an audience.
5	5.8	Word Processing with MS Word	1	Making a Document from a Blank Page	To know what a word processing tool is for
5	5.8	Word Processing with MS Word	2	Inserting Images: Considering Copyright	To add and edit images to a word document.
5	5.8	Word Processing with MS Word	3	Editing Images in Word	To know how to edit images and use word wrap with images and text.
5	5.8	Word Processing with MS Word	4	Adding the Text	To change the look of text within a document.
5	5.8	Word Processing with MS Word	5	Finishing Touches	To add features to a document to enhance its look and usability.
5	5.8	Word Processing with MS Word	6	Presenting Information Using Tables	To use tables within MS Word to present information.
5	5.8	Word Processing with MS Word	7	Writing a Letter Using a Template	To introduce children to templates.
5	5.8	Word Processing with MS Word	8	Presenting Information - Newspaper	To consider page layout including heading and columns.
5	5.8	Word Processing with Google Docs	1	Making a Document from a Blank Page	To know what a word processing tool is for.

5	5.8	Word Processing with Google Docs	2	Inserting Images: Considering Copyright	To add and edit images to a document.
5	5.8	Word Processing with Google Docs	3	Editing Images	To know how to use word wrap with images and text.
5	5.8	Word Processing with Google Docs	4	Adding the Text	To change the look of text within a document.
5	5.8	Word Processing with Google Docs	5	Finishing Touches	To add features to a document to enhance its look and usability.
5	5.8	Word Processing with Google Docs	6	Sharing Files	To use the sharing capabilities in Google docs
5	5.8	Word Processing with Google Docs	7	Presenting Information Using Tables	To use tables within Google Docs to present information.
5	5.8	Word Processing with Google Docs	8	Writing a Letter Using a Template	To introduce children to templates.
6	6.1	Coding	1	Designing and Making a more Complex Program	To design a playable game with a timer and a score. To plan and use selection and variables. To understand how the launch command works.
6	6.1	Coding	2	Designing and Making a more Complex Program	To design a playable game with a timer and a score. To plan and use selection and variables. To understand how the launch command works.
6	6.1	Coding	3	Using Functions	To use functions and understand why they are useful. To understand how functions are created and called.
6	6.1	Coding	4	Flowcharts and Control Simulations	To use flowcharts to test and debug a program. To create a simulation of a room in which devices can be controlled.
6	6.1	Coding	5	User Input	To understand the different options of generating user input in 2Code. To understand how user input can be used in a program.
6	6.1	Coding	6	Using Text-based Adventures	To understand how 2Code can be used to make a text-based adventure game.

6	6.2	Online Safety	1	Message in a Game	<ul style="list-style-type: none"> •To identify benefits and risks of mobile devices broadcasting the location of the user/device, e.g., apps accessing location. •To identify secure sites by looking for privacy seals of approval, e.g., https, padlock icon. •To identify the benefits and risks of giving personal information and device access to different software.
6	6.2	Online Safety	2	Online Behaviour	<ul style="list-style-type: none"> •To review the meaning of a digital footprint and understand how and why people use their information and online presence to create a virtual image of themselves as a user. •To have a clear idea of appropriate online behaviour and how this can protect themselves and others from possible online dangers, bullying and inappropriate behaviour. •To begin to understand how information online can persist and give away details of those who share or modify it.
6	6.2	Online Safety	3	Screen Time	<ul style="list-style-type: none"> •To understand the importance of balancing game and screen time with other parts of their lives, e.g., explore the reasons why they may be tempted to spend more time playing games or find it difficult to stop playing and the effect this has on their health. •To identify the positive and negative influences of technology on health and the environment.
6	6.3	Spreadsheets	1	Exploring Probability	To use a spreadsheet to investigate the probability of the results of throwing many dice.
6	6.3	Spreadsheets	2	Creating a Computational Model	<ul style="list-style-type: none"> •To use a spreadsheet to calculate the discount and final prices in a sale. <p>Create a formula to help work out the prices of items in the sale.</p>
6	6.3	Spreadsheets	3	Use a Spreadsheet to Plan Pocket Money Spending	•To use a spreadsheet to plan how to spend pocket money and the effect of saving money.
6	6.3	Spreadsheets	4	Planning a School Event	•To use a spreadsheet to plan a school charity day to maximise the money donated to charity.
6	6.3	Spreadsheets	5	Planning a School Event	•To use a spreadsheet to plan a school charity day to maximise the money donated to charity.

6	6.4	Blogging	1	What is a Blog?	<ul style="list-style-type: none"> • To identify the purpose of writing a blog. • To identify the features of successful blog writing.
6	6.4	Blogging	2	Planning a Blog	<ul style="list-style-type: none"> • To plan the theme and content for a blog.
6	6.4	Blogging	3	Writing a Blog	<ul style="list-style-type: none"> • To understand how to write a blog and a blog post. • To consider the effect upon the audience of changing the visual properties of the blog. • To understand how to contribute to an existing blog.
6	6.4	Blogging	4	Sharing Posts and Commenting	<ul style="list-style-type: none"> • To understand the importance of commenting on blogs. • To peer-assess blogs against the agreed success criteria. • To understand how and why blog posts and comments are approved by the teacher.
6	6.5	Text Adventures	1	What Is a Text Adventure? Planning a Story Adventure	<ul style="list-style-type: none"> • To find out what a text-based adventure game is and to explore an example made in 2Create a Story. • To use 2Connect to plan a 'Choose your own Adventure' type story.
6	6.5	Text Adventures	2	Making a Story-based Adventure Game	<ul style="list-style-type: none"> • To use 2Connect plans for a story adventure to make the adventure using 2Create a Story.
6	6.5	Text Adventures	3	Introducing Map-Based Text Adventures	<ul style="list-style-type: none"> • To introduce an alternative model for a text adventure which has a less sequential narrative.
6	6.5	Text Adventures	4	Coding a Map-Based Text Adventure	<ul style="list-style-type: none"> • To use written plans to code a map-based adventure in 2Code.
6	6.6	Networks	1	The World Wide Web and the Internet	<ul style="list-style-type: none"> • To discover what the children know about the Internet.
6	6.6	Networks	2	Our School Network and Accessing the Internet	<ul style="list-style-type: none"> • To find out what a LAN and WAN are. • To find out how we access the internet in school.

6	6.6	Networks	3	Research	<ul style="list-style-type: none"> •To research and find out about the age of the internet. •To think about what the future might hold.
6	6.7	Quizzing	1	Introducing 2DIY	<ul style="list-style-type: none"> •To create a picture-based quiz for young children.
6	6.7	Quizzing	2	Using 2Quiz	<ul style="list-style-type: none"> •To learn how to use the question types within 2Quiz.
		Quizzing	3	Using 2Quiz	<ul style="list-style-type: none"> •To learn how to use the question types within 2Quiz.
6	6.7	Quizzing	4	Exploring Grammar Quizzes	<ul style="list-style-type: none"> •To explore the grammar quizzes.
6	6.7	Quizzing	5	A Database Quiz	<ul style="list-style-type: none"> •To make a quiz that requires the player to search a database.
6	6.7	Quizzing	6	Are you Smarter than a 10- (or 11-) Year-Old?	<ul style="list-style-type: none"> •To make a quiz to test your teachers or parents.
6	6.8	Understanding Binary	1	What is Binary?	<p>Overarching Aim</p> <p>Examine how whole numbers are used as the basis for representing all types of data in digital systems through:</p> <ul style="list-style-type: none"> •To examine how whole numbers are used as the basis for representing all types of data in digital systems. •To recognise that digital systems represent all types of data using number codes that ultimately are patterns of 1s and 0s (called binary digits, which is why they are called digital systems). •To understand that binary represents numbers using 1s and 0s and these represent the on and off electrical states respectively in hardware and robotics.
6	6.8	Understanding Binary	2	Counting in Binary	<p>Overarching Aim</p> <p>Examine how whole numbers are used as the basis for representing all types of data in digital systems through:</p>

6	6.8	Understanding Binary	3	Converting from Decimal to Binary	<p>Overarching Aim</p> <p>Examine how whole numbers are used as the basis for representing all types of data in digital systems through:</p> <ul style="list-style-type: none"> •To examine how whole numbers are used as the basis for representing all types of data in digital systems. •To 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 •To represent whole numbers in binary, for example counting in binary from zero to 15, or writing a friend's age in binary.
6	6.8	Understanding Binary	4	Game States	<p>Overarching Aim</p> <p>Examine how whole numbers are used as the basis for representing all types of data in digital systems through:</p> <ul style="list-style-type: none"> •To examine how whole numbers are used as the basis for representing all types of data in digital systems. •To represent the state of an object in a game as active or inactive using the respective binary values of 1 or 0.
6	6.9	Spreadsheets with MS Excel	1	What is a Spreadsheet?	<ul style="list-style-type: none"> •To know what a spreadsheet looks like. •To navigate and enter data into cells.
6	6.9	Spreadsheets with MS Excel	2	Basic Calculations	<ul style="list-style-type: none"> •To introduce some basic data formulae in Excel. •To demonstrate how the use of Excel can save time and effort when performing calculations.
6	6.9	Spreadsheets with MS Excel	3	Modelling	<ul style="list-style-type: none"> •To use a spreadsheet to model a situation.
6	6.9	Spreadsheets with MS Excel	4	Organising Data	<ul style="list-style-type: none"> •To demonstrate how Excel can make complex data clear by manipulating the way it is presented.
6	6.9	Spreadsheets with MS Excel	5	Advanced Formulae and Big Data	<ul style="list-style-type: none"> •To use formulae for percentages, averages, max and min in spreadsheets.
6	6.9	Spreadsheets with MS Excel	6	Charts and Graphics	<ul style="list-style-type: none"> •To create a variety of graphs in Excel.

6	6.9	Spreadsheets with MS Excel	7	Using a Spreadsheet to Plan a Cake Sale	<ul style="list-style-type: none"> •To use a spreadsheet to model a real-life situation.
6	6.9	Spreadsheets with MS Excel	8	Using a Spreadsheet to Solve Problems	<ul style="list-style-type: none"> •To apply spreadsheet skills to solving problems.
6	6.9	Spreadsheets with Google Sheets	1	What is a Spreadsheet?	<ul style="list-style-type: none"> •To know what a spreadsheet looks like. •To navigate and enter data into cells.
6	6.9	Spreadsheets with Google Sheets	2	Basic Calculations	<ul style="list-style-type: none"> •To introduce some basic data formulae in Sheets. •To demonstrate how the use of Sheets can save time and effort when performing calculations.
6	6.9	Spreadsheets with Google Sheets	3	Modelling	<ul style="list-style-type: none"> •To use a spreadsheet to model a situation.
6	6.9	Spreadsheets with Google Sheets	4	Organising Data	<ul style="list-style-type: none"> •To demonstrate how spreadsheets can make complex data clearer by manipulating the way it is presented.
6	6.9	Spreadsheets with Google Sheets	5	Advanced Formulae and Big Data	<ul style="list-style-type: none"> •To use formulae for percentages, averages, max and min into spreadsheets.
6	6.9	Spreadsheets with Google Sheets	6	Charts and Graphics	<ul style="list-style-type: none"> •To create a variety of charts and graphs to understand data.
6	6.9	Spreadsheets with Google Sheets	7	Using a Spreadsheet to Plan a Cake Sale	<ul style="list-style-type: none"> •To use a spreadsheet to model a real-life situation.
6	6.9	Spreadsheets with Google Sheets	8	Using a Spreadsheet to Solve Problems	<ul style="list-style-type: none"> •To apply spreadsheet skills to solving problems.