Year 1/2 Cycle A	**Autumn Term**		
KEY FOCUS	**Online Safety Unit 1.1**	**Maze Explorers Unit 1.5**	**Questioning Unit 2.4**
Prior learning – link back	• Familiarity with Purple Mash from Reception Year	• Lego Builders: Logical decision making; Sequencing instructions; Following instructions	• Sorting data according to criteria • Collecting and presenting data in a picture format
NC Objectives	• Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	• understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions • create and debug simple programs • use logical reasoning to predict the behaviour of simple programs	• use technology purposefully to create, organise, store, manipulate and retrieve digital content
YEAR 1/2 OBJECTIVES	• 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. • 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 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. • 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). • 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 • To provide an opportunity for the children to set challenges for each other.	• To show that the information provided on pictograms is of limited use beyond answering simple questions • To use yes/no questions to separate information • To construct a binary tree to separate different items. • Use 2Question (a binary tree) to answer questions • To use a database to answer more complex search questions. • To use the Search tool to find information.

	• To learn how to search Purple Mash to find resources. • 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. • 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.	• To provide an opportunity for the teacher to add these challenges to a display board for the class to try.	
End points (What we want the children to remember)	• Know the importance of logging in and out safely • Know how to search Purple Mash to find resources	• Know how to create a simple algorithm. • Know how to debug an algorithm. • Use the additional direction keys to create a new algorithm.	• Match 2Simple item pictures to names using a binary tree. • Use a database to answer simple and more complex search questions
SKILLS	• Log in and out safely • Save learning and be able to open it up again • Search for resources on Purple Mash	• Use the direction keys in 2Go to move forwards, backwards, left and right. • Add a unit of measurement to the direction in 2Go Challenge 2. • Undo the last move. • Move the character back to the starting point	• understand what is meant by a database. • understand that questions are limited to 'yes' and 'no' in a binary tree. • understand that the user cannot use 2Question to find out answers to more complicated questions.
VOCABULARY	Alert; Avatar; Button; Device; File Name; Filter; Home Screen; Icon; Login; Log out; Menu; My Work Area; Notification; Password; Private; Purple Mash Tools; Saving; Search; Shared Folder; Textbox; Think About Box; Topic Area; Tool bar; Typing; Writing Template	Algorithm; Challenge; Command; Delete; Direction; Instruction; Left and Right; Route; Undo; Unit	Avatar; Binary Tree; Data; Database; Field; Information; Pictogram; Question; Record; Search; Sort

Year 1 / 2 Cycle A	Spring Term		
KEY FOCUS		**Animated Story Books Unit 1.6**	**Making Music Unit 2.7**
Prior learning – link back		• General use of Purple Mash • Design: avatar creation • Paint Projects: use of the simple paint tools	• Adding simple sound effects to stories in 2Create a Story
NC Objectives		• use technology purposefully to create, organise, store, manipulate and retrieve digital content	• use technology purposefully to create, organise, store, manipulate and retrieve digital content
YEAR 1/2 OBJECTIVES		• To understand the differences between traditional books and ebooks. • To explore the tools of 2Create a Story's My Simple Story level. • To save the page they have created • To add animation to a picture. • To play the pages created so far. • To save the additional changes and overwrite the file. • To add a sound effect to a picture. • To add a voice recording to the picture. • To add created music to the picture • 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. • 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.	• To be introduced to making music digitally using 2Sequence. • To explore, edit and combine sounds using 2Sequence • 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. • 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

End points (What we want the children to remember)		• Use the copy and paste function to add more pages to their own animated e-book. • Share their e-books on a class story book display board.	• Understand what 2Sequence is and how it works. • Create, upload and use their own recorded sound.
SKILLS		• Add animation, sound, voice recording and music to a page • Change font size and style • Open previously saved work	• Use the different sounds within 2Sequence to create a tune. • Explore how to speed up and slow down tunes. • Understand what happens to the tune when sounds are moved.
VOCABULARY		Animation; Background; Category; Clip-art gallery; Copy; Drop-down menu; E-book; Edit; Eraser; Features; Font; Sound; Overwrite; Paint tools; Paste; Play Mode; Redo; Save; Sound effect; Text; Undo; Voice recording	Bars; Beat; Compose; Note; Tune; Repeat; Sound Effect; Soundtrack; Speed; Tempo; Volume

Year 1 / 2 Cycle A	**Summer Term**		
KEY FOCUS		**Pictograms Unit 1.3**	**Presenting Ideas Unit 2.8**
Prior learning – link back		• Grouping and sorting: Sorting data according to criteria	• Animated Story Books: Creating text and the use of illustrations; Genre: animated picture book
NC Objectives		• use technology purposefully to create, organise, store, manipulate and retrieve digital content	• use technology purposefully to create, organise, store, manipulate and retrieve digital content

YEAR 1/2 OBJECTIVES		• To understand that data can be represented in picture format. • To contribute to a class pictogram. • To use a pictogram to record the results of an experiment.	• To explore how a story can be presented in different ways. • To make a quiz about a story or class topic. • To make a fact file on a non-fiction topic. • To make a presentation to the class.
End points (What we want the children to remember)		• Children collect data from rolling a die 20 times and record the results. They represent the results as a pictogram.	• Use a variety of software to manipulate and present digital content and information. • Collect, organise and present data and information in digital content. • Create digital content to achieve a given goal by combining software packages.
SKILLS		• Contribute to a class pictogram. • Discuss what the pictogram shows.	• Extract information from a 2Connect file to make a publisher fact file on a non-fiction topic. • Add appropriate clipart and photos. • Know that data can be structured in tables to make it useful.
VOCABULARY		Collect Data; Compare; Data; Pictogram; Record Results; Title; Totals; Visual	E-book; Fact file; Fiction; Mind Map; Multiple-choice; Node; Non-fiction; Presentation; Quiz

Year 1 / 2 Cycle B	**Autumn Term**		
KEY FOCUS	**Online Safety Unit 1.1**	**Effective Searching Unit 2.5**	**Coding Unit 1.7**
Prior learning – link back	• Familiarity with Purple Mash from Reception Year	• Safe logins • Using Purple Mash search functionality	• Lego Builders: Algorithms; Logical decision making; Sequencing instructions; Following instructions

NC Objectives	• Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	• Use technology purposefully to create, organise, store, manipulate and retrieve digital content • Recognise common uses of information technology beyond school	• use technology purposefully to create, organise, store, manipulate and retrieve digital content • understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions • create and debug simple programs use logical reasoning to predict the behaviour of simple programs
YEAR 1/2 OBJECTIVES	• 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. • 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. • 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.	• To understand the terminology associated with the Internet and searching. • To gain a better understanding of • searching the Internet. • To create a leaflet to help someone search for information on the Internet.	•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. To use code to make a computer program. • To understand what objects and actions are. • To understand what an event is. • To use an event to control an object. • To understand what an event is. • To begin to understand how code executes when a program is run. • To understand what backgrounds and objects are. • To understand how to use the scale property. • To plan a computer program. • To make a computer program.

	• 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.		
End points (What we want the children to remember)	• Know the importance of logging in and out safely • Know how to search Purple Mash to find resources	• Create a leaflet to help someone search for information on the Internet.	• Edit a scene by adding, deleting and moving objects. Use code to make the program they have designed work.
SKILLS	• Log in and out safely • Save learning and be able to open it up again • Search for resources on Purple Mash	• Identify the basic parts of a web search engine search page. • Recall the meaning of key Internet and searching terms. • Search the Internet for answers to a quiz (this may be adult led-for Year 1 pupils).	• Create a simple program using code blocks. • Use event, object and action code blocks. • Notice when the code executes when the program is run.
VOCABULARY	Alert; Avatar; Button; Device; File Name; Filter; Home Screen; Icon; Login; Log out; Menu; My Work Area; Notification; Password; Private; Purple Mash Tools; Saving; Search; Shared Folder; Textbox; Think About Box; Topic Area; Tool bar; Typing; Writing Template	Browser; Device; Digital Footprint; Domain; Internet; Network; Search Engine; URL; Web Address; Web Page; Web Site; World Wide Web	Action; Algorithm; Background; Click; Code blocks; Coding; Code view; Command; Debug\ Debugging; Design View; Event; Execute; Object; Output; Plan; Programmer; Properties; Run; Scene, software, sound; when clicked; Scale: Scene; Software; Sound; When Clicked

Year 1 / 2 Cycle B	**Spring Term**

Nether Alderley School – Art Long Term Planning

KEY FOCUS	Technology Outside School Unit 1.9	Creating Pictures Unit 2.6	
Prior learning – link back	• Familiarity with Purple Mash from Reception Year	• General use of Purple Mash • Design: avatar creation • Paint Projects: use of the simple paint tools	
NC Objectives	• recognise common uses of information technology beyond school	• Use technology purposefully to create, organise, store, manipulate and retrieve digital content	
YEAR 1/2 OBJECTIVES	• To find and understand examples of where technology is used in the local community • To record examples of technology outside school.	• To explore 2Paint A Picture. • To look at the work of Impressionist artists and recreate them using the Impressionism template. • To look at the work of pointillist artists such as Seurat. • To recreate pointillist art using the Pointillism template. • To look at the work of Piet Mondrian and recreate it using the Lines template. • To look at the work of William Morris and recreate it using the Patterns template. To look at some surrealist art and create your own using the eCollage function in 2Paint A Picture	
End points (What we want the children to remember)	• Record 4 examples of where technology is used away from school.	• How to Use the eCollage function in 2Paint A Picture • .	
SKILLS	• Understand what is meant by 'technology'. • Consider types of technology used in school and out of school.	• Recreate a variety of art genres using Pointillism, Impressionism, Lines, and Patterns templates. •	

VOCABULARY	Computer; Technology	Art; Clip-art; Diagonal; Dilute; eCollage; Fill; Horizontal; Impressionism; Line; Palette; Parallel; Pointillism; Repeating pattern; Rotated; Stamps; Style; Surrealism; Symmetry; Vertical	

Year 1 / 2 Cycle B	**Summer Term**		
KEY FOCUS	**Spreadsheets Unit 1.8**	**Lego Builders Unit 1.4**	
Prior learning – link back	• What is data? • Representing data	Familiarity with Purple Mash from Reception Year	
NC Objectives	• use technology purposefully to create, organise, store, manipulate and retrieve digital content	Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions	
YEAR 1/2 OBJECTIVES	• 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. • To add clipart images to a spreadsheet. • To use the 'move cell' and 'lock' tools. • To use the 'speak' and 'count' tools in 2Calculate to count items.	• To emphasise the importance of following instructions. • To follow and create simple instructions on the computer. To consider how the order of instructions affects the result.	
End points (What we want the children to remember)	• Navigate around a spreadsheet. • Explain what rows and columns are	• Organise instructions for a simple recipe. • Know that computers need precise instructions to follow. • Know that an algorithm written for a computer to follow is called a program.	

		Know that correcting errors in an algorithm or program is called 'debugging'.	
SKILLS	• Save and open sheets. • Enter data into cells. • Use the 'move cell' tool so that images can be dragged around the spreadsheet • Use the 'lock' tool to prevent changes to cells. • Give images a value that the spreadsheet can use to count them.	• Follow instructions in a computer program. • Explain the effect of carrying out a task with no instructions. Understand how the order in which the steps of a recipe are presented affects the outcome.	
VOCABULARY	Button; Calculations; Cell; Clip-art; Column; Count tool; Data; Delete; Image; Lock cell; Move cell; Row; Select; Speak tool; Spreadsheet; Value; Computer; Technology	Algorithm; Code; Computer; Debugging; Instructions; Machine; Program; Recipe; Sequence	

Year 3/4 Cycle A	Autumn Term		
KEY FOCUS	**Online Safety Unit 3.2**	**Spreadsheets Unit 3.3**	**Coding (3.1)**
Prior learning – link back	**Online Safety and PM (1.1)** • Safe logins • Concept of privacy • Concept of ownership • The need to logout **Technology Outside School (1.6)** • Developing ideas about the concept of technology that we are surrounded by and its purpose **Online safety (2.2)** • Share to a displayboard • Approval process • Sharing online • Email simulations • emotional impact of communications • digital footprint **Effective searching (2.5)** Search engine • Digital footprint • Privacy	**Spreadsheets (1:8)** Introduce 2Calculate • Spreadsheet navigation • Adding images • Vocab: cell, column, row **Pictograms (1:3)** • What is data? • Representing data **Spreadsheets (2.3)** Copying and pasting • Totalling tools • Addition • Table layout • Block graph **Questioning (2.4)** Ways to represent data • Pictograms (2Count) • Binary trees (2Question) • Databases (2Investigate)	**Coding (1.1):** Introducing block coding; Objects and actions; Events (Click event, sound output); Executing a program; Design view: Planning **Lego Builders** • Algorithms • Logical decision making • Sequencing instructions • Following instructions Maze Explorers • Coding a 'turtle' • Creating programs using sequencing and repeat. • Visual use of the Logo programming language. • Program logic and structure
NC Objectives	• Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	• Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
YEAR 3/4 OBJECTIVES	• 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 add and edit data in a table layout. • To find out how spreadsheet programs can automatically create graphs from data • To introduce the 'more than', 'less than' and 'equals' tools.	• *To review previous coding knowledge.* • *To understand what a flowchart is and how flowcharts are used in computer programming.* • *To understand that there are different types of timers.*

	• To understand how a blog can be used to help us communicate with a wider audience. 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. • 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.	• To introduce the 'spin' tool and show how it can be used to count through times tables. • To introduce the Advanced mode of 2Calculate. • To learn about describing cells using their addresses.	• *To be able to select the right type of timer for a purpose.* To understand how to use the repeat command. • To use coding knowledge to create a range of programs. • To understand the importance of nesting. • To design and create an interactive scene.
End points (What we want the children to remember)	• To have strategies for dealing with online bullying including screenshot and reporting.	• Create a table of data on a spreadsheet.	• Design and Make an Interactive Scene
SKILLS	• To understand what makes a good password. • Children understand that some information held on websites may not be accurate or true. • Children can identify some physical and emotional effects of playing/watching inappropriate content/games	• Children can use the 'more than', 'less than' and 'equals' tools to compare different numbers and help to work out solutions to calculations. • Use the 'spin' tool to count through times tables. • Describe a cell location in a spreadsheet using the notation of a letter for the column followed by a number for the row.	Read and explain flow charts Children can create a program that uses a timer-every command Children can use the repeat command with an object. Children can run, test and debug their programs • Children can plan their scene and code before they create their program.
VOCABULARY	Appropriate:• Blog: • Inappropriate: • Internet • Password: • Personal information: • Permission: • Reliable Source: • Reputable source • Spoof: • Verify: • Vlogs:• Website:	• Advanced Mode:• Bar graph: • Cell address: • Data: • Equals: • Less than: • More than • More than, less than & Equal too: • Pie Chart:• Quiz tool: • Spinner tool: • Table:	• Action: • Alert: • Algorithm: • Background: • Button: • Click events: • Code: • Collision • Command: • Debug\ Debugging: • Degrees • Flowchart:• Implement: • Input: • Interval: • Nest:• Object: • Predict: • Properties:

Year 3/4 Cycle A	Spring Term		
KEY FOCUS	**Unit 3.6 Branching Databases**	**Unit 3.8 Graphing**	**Unit 3.5 Email (including email safety)**
Prior learning – link back	**Grouping and Sorting Questioning All units (1.2)** • Use of 2Dos • Saving, opening and editing work • Sharing work • Copying and pasting • Mouse, keyboard and device skills Spreadsheets • Sorting data according to criteria **Pictograms (1.3)** • Collecting and presenting data in a picture format **Spreadsheets (2.3)** • Use of 2Calculate to collect data and produce a graph **Questioning (2.4)** Enquiry into different data handling tools • • Use of questioning to separate and group data	**Grouping and sorting (1.2)** • Sorting data according to criteria **Pictograms (1.3)** • Collecting and presenting data in a picture format • **Spreadsheets (2.3)** • Use of 2Calculate to collect data and produce a graph • **Questioning (2.4)** Enquiry into different data handling tools Use of questioning to separate and group data	**Online Safety and PM (1:1)** • Safe logins • Concept of privacy • Concept of ownership **Technology Outside School (1.6)** • Developing ideas about the concept of technology that we are surrounded by and its purpose **Online safety (2:2)** Sharing online • Email simulations • Emotional impact of communications • Digital footprint **Effective Searching (2.5)** • Exploration of what the Internet is • Accessing the World Wide Web • Digital Footprint • Searching and sharing
NC Objectives	• Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	• Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	• Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration. • Select, use and combine a variety of software (including internet services) on a range of digital devices to design and

			create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
YEAR 3/4 OBJECTIVES	• To sort objects using just YES/NO questions. • To complete a branching database using 2Question. • To create a branching database of the children's choice.	• Introducing 2Graph • Using 2Graph to Solve an Investigation	• To think about the different methods of communication. • To open and respond to an email. • To write an email to someone from an address book. • To learn how to use email safely. • To add an attachment to an email. • To explore a simulated email scenario.
End points (What we want the children to remember)	• Create a branching database.	• Solve a maths investigation and present the results in a range of graphical formats.	• Create a quiz about email safety • To respond to emails and to attach files.
SKILLS	• Understand how YES/NO questions are structured and answered. • Edit and adapt a branching database • Select and save appropriate images	• Set up a graph with a given number of fields. • Enter data for a graph. • Use the sorting option to make analysis of their data easier.	• list a range of different ways to communicate • open an email and respond to it. • Attach work to an email. • Know what CC means and how to use it.
VOCABULARY	• Binary Tree: • Branching Database:. • Data: • Database: • Debugging	• Axis: • Chart: • Column: • Data: • Graph:. • Investigation: • Row: • Sorting: • Survey: • Tally Chart: • Title:	• Address Book: • Attachment: • BCC – Blind Carbon Copy: • CC – Carbon Copy: • Communication: • Compose: • Email: • Inbox: • Link: • Mind mapping: • Node: Each bit of information on a mind map. • Password: • Personal • Save to draft: • Trusted Contact:

Year 3/4 Cycle A	Summer Term		
KEY FOCUS	**Unit 3.7 Simulations**	**Unit 4.8 Hardware Investigators**	**3.9 Presenting**
Prior learning – link back	**Coding (1.7)** • Following instructions • Creating simple programs • Computer simulation of real life events **Technology outside (1.9)** • Understanding the term 'technology' • Recognising the use of technology around them **Coding (2.1)** • Algorithms • Collision detection - simulating air traffic control • Object types • Debugging	Technology Outside School (1.9) • Developing ideas about the concept of technology that we are surrounded by and its purpose • Understanding that many devices use computational technology Effective Searching (2.5) • Exploration of what the Internet is and how devices allow connections to access functions and the World Wide Web • Searching and sharing Email (3.5) • Using device functions for 2-way communication via the World Wide Web Effective Searching (4.7) • Understanding of the 2-way communication technologies using algorithms that run of the hardware	**Touching typing (3.4)** • Keyboard skills • Typing fluency **Presenting ideas (2.8)** • Presenting ideas in art form • 2Paint a Picture: art effects, collage effects • Creating work for a variety of purposes and different genres **Creating Pictures (2.6)** • Presenting the same information in different styles: animated story, quiz based on a story, concept map of a story, writing template **Animated story books (1.6)** • Creating text and the use of illustrations • Genre: animated picture book
NC Objectives	• Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	• Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration.	• Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour;

			identify a range of ways to report concerns about content and contact.
YEAR 3/4 OBJECTIVES	• To find out what a simulation is and understand the purpose of simulations. • To explore a simulation, making choices and discussing their effects. • To work through and evaluate a more complex simulation.	• To understand the different parts that make up a desktop computer. • To recall the different parts that make up a computer.	• To create a page in a presentation. • To add media to a presentation • To add shapes and lines to a presentation • To add animations into a presentation. • To use the skills learnt in previous weeks to design and present an effective presentation.
End points (What we want the children to remember)	• Create own simulation	• Create a leaflet to show the function of computer parts.	• To design and present an effective presentation.
SKILLS	• Know that a computer simulation can represent real and imaginary situations. • Explore a simulation. • Recognise patterns within simulations and make and test predictions.	• Name the different parts of a desktop computer. • Know what the function of the different parts of a computer is.	• Know what Google Slides is. • Know how to open Google Slides. • Know how to add text and format it. • Change the design of the slides. • Insert a new slide. • Insert pictures. • Add shapes to a presentation. • Add lines into a presentation. • Add objects including text and pictures.
VOCABULARY	Advantages: • Analysis: • Decision:. • Evaluation: • Modelling: • Point-of-view: • Realistic: Representing things accurately and true to real life. • Simulation: . • Solution: • Unrealistic:	Components: • CPU: • Graphics Card: • Hard Drive: • Hardware: • Input: • Motherboard: • Network Card: • Output: • Peripherals: • RAM:• Software:	Animation: The process of adding movement to still objects. • Audio: Another word for sound. • Border Properties: The style of the border around text or an object including the colour, thickness and dashes (version dependent options). • Duration: How long something lasts for. • Editing: To improve something so that it is ready for publication. • Fill colour: The internal colour of an object such as a textbox (version dependent options). • Font formatting: Changing the appearance of text on the screen. • Layer: Describes which objects appear in the front (foreground) of a slide and which appear behind

			other objects. (Version dependent options). • Media: Information in the form of words, sounds, numbers, images, or graphics in electronic, print or broadcast form. • Presentation: A visual way of displaying information to an audience that is clear and engaging. It can contain text, images, animation and videos. • Presentation Design: The overall look of a presentation including background, fonts, footers and colours. • Preview: An opportunity to look at something before it goes live. • Review: To look at something critically and consider how it could be improved. • Slide: A single page of a presentation. • Slideshow: A collection of pages arranged in sequence that contains text and images to present to an audience. • Sound effect: A sound other than speech or music made artificially for use in a play, film, or presentation. • Textbox: An object that can be inserted into a piece of work in a program that allows the user to input text. • Theme: A ready-made template including colours and fonts that can be edited by the user. • Timing: A particular point or period of time when something happens. • Transition: How a slide moves from one to the next. • Video: A recording of a moving image. • WordArt: A way of changing the appearance of text often using decorative shapes

Year 3 /4 Cycle B	**Autumn Term**		
KEY FOCUS	**Online safety 4.2**	**Unit 3.4 Touch Typing**	**Unit 4.7 Effective Search**

Nether Alderley School – Art Long Term Planning

Prior learning – link back	**Online Safety and PM (1.1)** • Safe logins • Concept of privacy • Concept of ownership **The need to logout Technology Outside School (1.6)** • Developing ideas about the concept of technology that we are surrounded by and its purpose **Online safety (2.2)** • Share to a display board • Approval process • Sharing online • Email simulations • emotional impact of communications • digital footprint **Effective searching (2.5)** Search engine • Digital footprint • Privacy **Online Safety (3.2)** • Good Passwords and password privacy • Communication methods • Shared blog **Email (3.5)** • Evaluating communications • email safety • sharing images – safety • not meeting • attachments • Reliability of information and spoof websites • appropriate ratings • emotional effects	**Exploring purple mash (1:1)** • General use of Purple Mash • Simple text entry • Use of a writing template **Effective searching (2.5)** • Efficient use of a search engine • Leaflet creation **Presenting ideas (2.8)** Presenting ideas in a variety of styles including through typed text	• Online Safety and Exploring (1.1) • Safe logins • Using Purple Mash search functionality • Technology Outside School (1.6) • Developing ideas about the concept of technology that we are surrounded by and its purpose • Online safety (2.2) • Sharing to a display board • Sharing online • Digital footprint • Effective searching (2.5) • Exploration of what the Internet is • Accessing the World Wide Web • Digital Footprint • Searching and sharing • Online safety (3.2) • Reliability of information and spoof websites • Appropriate ratings Reporting problems

	• Cyberbullying • reporting problems		
NC Objectives	• Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration. • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	• Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration. Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.
YEAR 3/4 OBJECTIVES	• 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. • To identify the risks and benefits of installing software including apps. • 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. • 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.	• 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 • To practice and improve typing for home, bottom, and top rows. • To practice the keys typed with the left hand. • To practice the keys typed with the right hand.	• To locate information on the search results page. • To use search effectively to find out information. • To assess whether an information source is true and reliable.

End points (What we want the children to remember)	• Give reasons for limiting screen time • Give examples of things that they would not want to be in their digital footprint.	• Children can touch type with both left and right hands.	• To analyse contents of a webpage for clues about the credibility of the information.
SKILLS	• Understand that security symbols such as a padlock protect their identity online.	• To know the names of fingers • To understand what is meant by the home, bottom, and top rows.	• Use search to answer a series of questions.
VOCABULARY	AdFly: • Attachment: • Citation: • Collaborate: • Collaborative database:. • Cookies • Copyright:• Data analysis:. • Digital footprint: • Malware: • Phishing: • Plagiarism: • Ransomware: • Report: • SMART rules: • Software: • Spam: Water mark; Virus	Keys; posture; space bar; typing	Balanced view: • Easter eggs: • Internet: • Key words: • Reliability: • Results page: • Search engine:

Year 3/4 Cycle B	**Autumn Term**	**Spring Term**	
KEY FOCUS	**4.9** **Making Music**	**Coding 4.1**	**Unit 4.4** **Writing for different audiences**
Prior learning – link back	1.6 Animated story books • Adding simple sound effects to stories in 2Create a Story	**Coding (1.1)** • Introducing block coding • Objects and actions • Events (Click event, sound output) • Executing a program • Design view: Planning	Animated stories (1.6) Creating text and the use of illustrations • Genre: animated picture book Exploring purple mash (1.1) General use of Purple Mash

	2.7 Making Music • Digitally creating music and sound effects on 2Sequence 4.6 Animation • Use of music and sounds in stop animation creation	**Lego Builders (1.4)** • Algorithms • Logical decision making • Sequencing instructions • Following instructions **Maze Explorers (1.5)** • Coding a 'turtle' • Creating programs using sequencing and repeat. • Visual use of the Logo programming language. • Program logic and structure. **Coding (2.1)** Algorithms • Collision detection • Timers • Object types • Buttons • Debugging **Questioning (2.4)** Logical decision processing • Forward planning to achieve a solution **Coding (3.1)** • Flowcharts • Timers • Repeat • Code, test, debug process **Branching Databases (3.6)** • Logical decision processing • Modelling selection on a binary model	• Simple text entry • Use of a writing template Presenting ideas (2.8) Creating work for a variety of purposes • Further understanding of genres • Presenting the same information in different styles: animated story, quiz based on a story, concept map of a story, writing template • Altering fonts • Share to a displayboard Simulations (3.7) Use of 2Simulate • Familiarity with two simulations: Locked Out and The Dark Side of Elpmis • Use of Email simulations Email • Considering communication style • Email simulations Touch typing (3.4) Keyboard skills • Typing fluency
NC Objectives	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. • Use sequence, selection and repetition in programs; work with variables and various forms of input and output	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

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YEAR 3/4 OBJECTIVES	• To identify and discuss the main elements of music: Pulse, Rhythm, Tempo, Pitch, Texture • To understand and experiment with rhythm and tempo • To create a melodic phrase.	• To review coding vocabulary and knowledge. • To create a simple computer program. • To begin to understand selection in computer programming. • To understand how an IF statement works • To understand how to use coordinates in computer programming. • To understand how an IF statement works. • To understand the Repeat until command.	• To explore how font size and style can affect the impact of a text. • To use a simulated scenario to produce a news report. • To use a simulated scenario to write for a community campaign.
End points (What we want the children to remember)	• To compose a piece of electronic music.	• Create a program that includes and IF/ ELSE statement.	• To write a persuasive letter or poster Write a newspaper report
SKILLS	Use appropriate musical language to discuss a piece of music. Identify sounds in a piece of music. Recall a simple rhythm. Explain what tempo is, and how changing it can change the mood of a piece of music. Create their own simple rhythm using Busy Beats. Show an understanding of melody. Create a simple melodic pattern using 2Sequence and Busy Beats. Use a variety of notes, experimenting with pitch.	• use a background and objects to create a scene. • Interpret a flowchart that depicts an IF statement • read code that includes repeat until and IF/ ELSE and explain how it works use variables when programming.	• use text formatting to make a piece of writing fit for its audience and purpose. • Use 2Connect to mind-map
VOCABULARY	• BPM: Beats per Minute. Changing the BPM changes the speed of the music. • Dynamics: How loud or quiet a sound is. • Harmonious: Notes which sound tuneful and pleasant together. • Melody: A sequence of notes which make up a tune. • Pitch: How high or low a sound is. • Pulse: The steady beat of a piece of music. • Rhythm: A	• Action: • Algorithm: • Background: • Button:. • Code blocks: • Command: • Co-ordinates: • Debug\ Debugging: • Design: • Event: • Execute: • Flowchart: • 'If' statement:. • 'If/Else' statement: • Input:	• Campaign: • Format: • Font: • Genre: • Opinion: • Reporter: • Viewpoint:

	pattern of long and short sounds and silences. • Tempo: How slow or fast a piece of music is. • Texture: The different sounds you can hear in a piece of music. • Synths: Short for synthesizer. Electronic musical instrument sounds.		

Year 3/4 Cycle B	**Summer Term**		
KEY FOCUS	**Unit 4.5 Logo**	**Unit 4.6 Animation**	**Unit 4.3 Spreadsheets**
Prior learning – link back	• Lego builders (1.4) • Logical decision making • Sequencing instructions • Following instructions • Maze explorers (1.5) • Visual use of the Logo programming language. • Program logic and structure • Coding (1.7) • Familiarity with a code environment • Logical planning of sequences • Debugging skills • Coding (2.1) • Familiarity with a code environment. • Logical planning of sequences • Debugging skills • Questioning (2.4) • Logical decision processing • Forward planning to achieve a solution • Coding (3.1) • Familiarity with a code environment • Logical planning of sequences • Debugging skills	• Lego builders (1.4) • Logical decision making • Sequencing instructions • Following instructions • Maze explorers (1.5) • Visual use of the Logo programming language. • Program logic and structure • Coding (1.7) • Familiarity with a code environment • Logical planning of sequences • Debugging skills • Coding (2.1) • Familiarity with a code environment. • Logical planning of sequences • Debugging skills • Questioning (2.4) • Logical decision processing • Forward planning to achieve a solution • Coding (3.1) • Familiarity with a code environment • Logical planning of sequences • Debugging skills	• **Spreadsheets (1.8)** • Introduce 2Calculate • Spreadsheet navigation • Adding images • Vocab: cell, column, row • **Pictograms (1.3)** • What is data? • Representing data **Spreadsheets (2.3)** • Copying and pasting • Totalling tools • Addition • Table layout • Block graph **Questioning (2.4)** Ways to represent data • Pictograms (2Count) • Binary trees (2Question)

	• Branching Databases (3.6) • Logical decision processing • Forward planning to achieve a solution	• Branching Databases (3.6) Logical decision processing • Forward planning to achieve a solution	
NC Objectives	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
YEAR 3/4 OBJECTIVES	• To learn the structure of the language of 2Logo. • To input simple instructions in 2Logo • To use 2Logo to create letter shapes. • To use the Repeat command in 2Logo to create shapes. • To use and build procedures in 2Logo.	• To learn the structure of the language of 2Logo. • To input simple instructions in 2Logo • To use 2Logo to create letter shapes. • To use the Repeat command in 2Logo to create shapes. To use and build procedures in 2Logo.	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 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. • To use the line graphing tool in 2Calculate with appropriate data. • To interpret a line graph to estimate values between data readings. To use the currency formatting tool in 2Calculate. • To use 2Calculate to create a model of a real-life situation. • To use the functions of allocating value to images in 2Calculate to make a resource to teach place value.

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End points (What we want the children to remember)	• To create 'flowers' or 'crystals' using 2Logo • To write 2Logo instructions for a word of four letters. To draw patterns using 2Logo	• To create 'flowers' or 'crystals' using 2Logo • To write 2Logo instructions for a word of four letters. • To draw patterns using 2Logo	• To create a line graph • To create a model of a real life situation To make a resource to teach place value
SKILLS	• Use the Procedure feature. • Create shapes using the Repeat command. • Follow simple 2Logo instructions • Use the repeat command	• Use the Procedure feature. • Create shapes using the Repeat command. • Follow simple 2Logo instructions • Use the repeat command •	• Use the number formatting tools within 2Calculate to appropriately format numbers. • Add a formula to a cell to automatically make a calculation in that cell. • Use the timer, random number and spin button tools. • Combine tools to make fun ways to explore number. • Use a line graph to find out when the temperature in the playground will reach 20°C. • Use the currency formatting in 2Calculate Allocate values to images and use these to explore place value.
VOCABULARY	Debugging:• Grid: • Logo: • Logo Commands (e.g. FD, BK, RT, LT) : • Multi Line Mode: • Pen Down: • Pen Up: • Prediction:• Procedure: • Repeat: • Run Speed: • SETPC: • SETPS:	Debugging:• Grid: • Logo: • Logo Commands (e.g. FD, BK, RT, LT) : • Multi Line Mode: • Pen Down: • Pen Up: • Prediction:• Procedure: • Repeat: • Run Speed: • SETPC: • SETPS:	• Average: • Budget: • Calculations: • Chart: • Column: Boxes running vertically in a spreadsheet. • Data: • Decimal place: • Equals to tool:. • Format Cell: • Formula:. • Formula Wizard: • Line graph: • Percentage. • Place value: • Random number tool: • Resize: • Row: • Set image:

Year 5/6 Cycle A	**Autumn Term**		
KEY FOCUS	**Unit 5.2 Online safety**	**Coding (5.1)**	**Unit 5.3 Spreadsheets**
Prior learning – link back	Effective Searching (4.7) • Reliable sources • Search algorithms - impact on what you see Online Safety (4.2) • Phishing • Digital footprint • Malware and viruses • Plagiarism • Screen time Email (3.5) • Evaluating communications • Email safety • Sharing images - safety • Not meeting • Attachments Online Safety (3.2) • Good Passwords and password privacy • Communication methods • Shared blog Reliability of information and spoof websites • appropriate ratings • emotional effects • Cyberbullying • Reporting problems	Animation (4.6) • Sequencing and animation in logical steps Logo (4.5) • Text-based coding • Utilize understanding of coding structures Coding (4.1) • Code, test, debug process • IF statements • Repeat Until and IF/ ELSE Statements • Number Variables	Spreadsheets (4.3) • Formula wizard • Cell formatting • Timer, random number and spin buttons • Budget planner sheet • Line graphs

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NC Objectives	• Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration. • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. • Use sequence, selection and repetition in programs; work with variables and various forms of input and output • Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. • Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	• Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
YEAR 5/6 OBJECTIVES	• 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. 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. 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	To review existing coding knowledge. • To begin to be able to simplify code. • To create a playable game. To understand what a simulation is. • To program a simulation using 2Code 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. To understand how to use friction in code. • To begin to understand what a function is and how functions work in code. To understand what the different variable types are and how they are used differently. • To understand how to create a string	• To use formulae within a spreadsheet to convert measurements of length and distance. • To use the count tool to answer hypotheses about common letters in use. • To use a spreadsheet to model a real-life problem. • To use formulae to calculate area and perimeter of shapes. • To create formulae that use text variables • To use a spreadsheet to help plan a school cake sale.

	Ensuring reliability through using different methods of communication.		
End points (What we want the children to remember)	Use the SMART rules as a source of guidance when online. Select keywords and search techniques to find relevant information and increase reliability. Know what makes a good password	Create a simple playable game. Create a program which represents a physical system.	• Use a spreadsheet to plan a school cake sale
SKILLS	Know who to tell if they are upset by something that happens online Think critically about what they share online Cite all sources when researching and explain the importance of this.	use simplified code select the right images to reflect the simulation they are making set/change variable values appropriately	• Use a spreadsheet to work out which letters appear most often. • Use the 'how many' tool. • Create formulas in a spreadsheet for example how many days there are in x number of weeks or years and converting measurement
VOCABULARY	Citation, collaborate, communication**,** Creative Commons Licence, Copyright, Encrypt, Identify theft, Ownership, PEGI ratings, Malware, Phishing, Personal information, password, smart rules, spoof, validity	Event, function, input, nesting, object, output, physical system, properties, repeat, selection, sequence, simplify, timer, variable.	Rows, spreadsheet, column, data, formula, advance mode, format, formula bar, formula wizard, 'How Many?' Tool, variable, Totalling tool

Year 5/6 Cycle A	**Spring Term**	
KEY FOCUS	**Unit 5.7 Concept Maps**	**Unit 5.5 Game Creator**

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Prior learning – link back	Touch typing (3.5) • Keyboard skills • Typing fluency Presenting with MS PowerPoint or Google Slides (3.6) • Learning about good presentations: both content and delivery Writing for different audiences (4.4) • Understanding importance of text formatting and organisation • Transferring information from a concept map into a written report	Animation (4.6) Create a stop motion animation using 2Animate • Use of sounds, backgrounds and effects Making Music (4.9) • Electronically compose a themed piece of music on Busy Beats	
NC Objectives	• Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. • Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	
YEAR 5/6 OBJECTIVES	• To understand the need for visual representation when generating and discussing complex ideas. • To understand the uses of a 'concept map' • To understand and use the correct vocabulary when creating a concept map. To create a concept map. • To understand how a concept map can be used to retell stories and information. • To create a collaborative concept map and present this to an audience.	• To Introduce the 2DIY 3D tool. • To begin planning a game. • To design the game environment. • To design the game quest to make it a playable game. • To finish and share the game. • To self- and peer evaluate.	

End points (What we want the children to remember)	Create a basic concept map.	• Design own game • Write instructions for their game	
SKILLS	• Understand what is meant by 'concept maps', 'stage', 'nodes' and 'connections.'	• Describe some of the elements that make a successful game. • Upload images and use the drawing tool. • Evaluate their own game	
VOCABULARY	Concept: • Concept Map: • Connection: • Collaborate:. • Heading: • Sub-Heading:. • Node: • Presentation Mode: • Story Mode:	Evaluation: • Feedback: • Image: • Instructions: • Promotion:. • Quest: • Scene: • Screenshot: • Texture: • Theme	:

Year 5/6 Cycle A	**Summer Term**		
KEY FOCUS	**Unit 6.6 Networks**	**Quizzing Unit 6.7**	
Prior learning – link back	*All units*	**Grouping and sorting (1.2)** Sorting data according to criteria on 2Quiz **Pictograms (1.3)** Asking questions to collect data in picture format **Questioning (2.4)** Enquiry into different data handling tools Use of questioning to separate and group data **Presenting Ideas (2.8)** Recognising that digital content can be represented in many forms Presenting ideas in 2Quiz **Branching Databases (3.6**) Understanding structure of YES/NO questions in a branching database	

		Writing for Different Audiences (4.4) Considering understanding and abilities of an audience **Databases (5.4)** Creating and searching a database for information Wording of questions to be effectively answered by searching a database **Game creator (5.5)** Creating game environment Writing instructions • Considering playability and challenge for audience	
NC Objectives	Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration.	• Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	
YEAR 5/6 OBJECTIVES	• To discover what the children know about the Internet. • To find out what a LAN and WAN are. • To find out how we access the internet in school. • To research and find out about the age of the internet. To think about what the future might hold.	• To create a picture-based quiz for young children. • To learn how to use the question types within 2Quiz. • To explore the grammar quizzes. • To make a quiz that requires the player to search a database • To make a quiz to test your teachers or parents.	
End points (What we want the children to remember)	To research and find out about the age of the internet explaining the major changes that have taken place	• Create a picture-based quiz for young children. • Create a quiz to test teachers or parents.	

SKILLS	• Know the difference between the World Wide Web and the internet. Explain the differences between more than two network types such as: LAN, WAN, WLAN and SAN.	• Use 2DIY • Understand the different question types within 2Quiz. • Choose appropriate tools to make their own grammar game(s). • Respond to feedback	
VOCABULARY	• Data: • DNS (Domain Name Server): • Ethernet: • Hosting: • Hub\Switch: • Internet: • IP address: • ISP (Internet Service Provider): • LAN (Local Area Network): • Network: • Router: • Search engine: • WAN (Wide Area Network): • Web Page: • Web server:. • Website: • WLAN: (• Wi-Fi:. • World Wide Web	• Audience: • Audio: • Case-Sensitive: • Clipart: Simple pictures to use on computers. • Clone: • Cloze: • Copy\Paste: • Database: • Database Record: • Database Field: • Image: • Image Filter: • Selfie: • Statistics: • Undo\Redo: • Preview: • Quiz:	

Year 5/6 Cycle B	**Autumn Term**		
KEY FOCUS	**Unit 6.2 Online safety**	**Coding (6.1)**	**Unit 6.3 Spreadsheets**
Prior learning – link back	Online Safety (5.2) • Responsibility to others when sharing • Sources of support • SMART rules • Sharing passwords • Image manipulation • Citing sources • Searching • Reliability Word Processing (5.8) • Use of images • Plagiarism • Citing sources	Coding (5.1) • Efficient Coding • Simulating a Physical System# • Decomposition and Abstraction • Friction and Functions • Introducing Strings • Text Variables and Concatenation	Databases (5.4) • Data representation in 2Investigate • Creating and interrogating data • Use of filter, sort and search Spreadsheets (5.3) • Converting measures • Count tool • Formulae • Variables in formulae • Event planning

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NC Objectives	• Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration • Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact*	• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. • Use sequence, selection and repetition in programs; work with variables and various forms of input and output. • Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	• Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
YEAR 5/6 OBJECTIVES	• 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. • 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	• To design a playable game with a timer and a score. • To plan and use selection and variables. • To understand how the launch command works. • To use functions and understand why they are useful. • To understand how functions are created and called • To use flowcharts to test and debug a program. • To create a simulation of a room in which devices can be controlled. • To understand the different options of generating user input in 2Code. • To understand how user input can be used in a program.	• To use a spreadsheet to investigate the probability of the results of throwing many dice. • To use a spreadsheet to calculate the discount and final prices in a sale. Create a formula to help work out the prices of items in the sale. • To use a spreadsheet to plan how to spend pocket money and the effect of saving money. • To use a spreadsheet to plan a school charity day to maximise the money donated to charity.

	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 • 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.	• To understand how 2Code can be used to make a text-based adventure game.	
End points (What we want the children to remember)	• Give reasons for limiting screen time. • Talk about the positives and negative aspects of technology and balance these opposing views.	• Design their own text-based adventure game.	• Use a spreadsheet to plan a school charity day to maximise the money donated to charity.
SKILLS	• Research risks online including sharing location, secure websites, spoof websites, phishing, and other email scams. • Research to refresh their memories about the steps they can take to protect themselves including protecting their digital footprint, where to go for help, smart rules and security software.	• Plan a program which includes a timer and a score. • Debug when things do not run as expected. • Create a program that makes use of functions. • Can follow flowcharts to create and debug code.	• Create a spreadsheet to answer a mathematical question relating to probability • Take copy and paste shortcuts. • Problem solve using the count tool. • Use the formula wizard to create formulae.
VOCABULARY	Data Analysis: • Digital Footprint: • Inappropriate: • Location sharing: • Password: • PEGI rating: • Phishing: • Print Screen: • Screen Time: • Secure websites:• Spoof:	Action: • Algorithm: • Command: • Concatenation: • Co-ordinates: • Debug\ Debugging: • Decomposition: • Event: • Execute\ Run: • Flowchart: • Function: • Input: • Launch Command: Object: Items in a program that can be given instructions to move or change in some way (action). In 2Code Gorilla, the object types are button number, input, text, shape turtle, character, object, vehicle, animal. • Output: •	• Advanced mode: • Budget: • Chart: Columns: • Count (How Many?) Tool: • Data: • Dice Tool:. • Expense:. • Format Cell: • Formula: • Formula Bar: • Formula wizard: • Move Cell Tool: • Percentage:. • Probability: • Profit: • Rows: • Spreadsheet:

		Predict: • Procedure: • Properties: • Repeat: • Repeat until: • Selection: • Sequence: • Simulation: • String: Text or a combination of text characters and numbers: • Tabs: • Text Adventure: • Text Object: • Timer: • Turtle Object: • Variable: • x and y properties:	

Year 5/6 Cycle B	**Spring Term**		
KEY FOCUS	**Unit 6.4 Blogging**	**Unit 5.4 Databases**	
Prior learning – link back	**Online Safety (6.2)** • Responsibility to others when sharing • Sources of support • Screen time • Being a bystander	Graphing (3.8) • Displaying and interrogating data in a graph form. Branching data bases (3.6) Sorting and interrogating data Spreadsheets (3.3) • Use of 2Calculate to collect data and produce a variety of graphs Spreadsheets (4.3) • Inputting and Interrogating data • Presenting data through line graphs	
NC Objectives	Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration.	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals,	

	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact*.	including collecting, analysing, evaluating and presenting data and information.	
YEAR 5/6 OBJECTIVES	To identify the purpose of writing a blog. • To identify the features of successful blog writing • To plan the theme and content for a blog. To understand how to write a blog and a blog post. • To consider the effect upon the audience of changing the visual properties of the blog. • To understand how to contribute to an existing blog. • To understand 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.	• To learn how to search for information in a database • To contribute to a class database. To create a database around a chosen topic.	
End points (What we want the children to remember)	• Create a blog for a specific purpose	• Create a topic database • Design an Avatar for a class database	
SKILLS	• Understand the key features of a blog. • Post comments and blog posts to an existing class blog. • Assess the effectiveness and impact of a blog.	• Understand the different ways to search a database. • Search a database to answer questions correctly • Enter information into a class database • Add records to their database. Know what a database field is.	
VOCABULARY	• Approval: • Archive: . • Blog: • Blog post: • Collaborate: • Commenting: • Connections: • Nodes: • Vlog:	Arrange: • Avatar: • Chart:. • Collaborative:. • Data:. • Database: • Database Report: • Field: • Group: • Record:. • Search: • Statistics:	

Year 5/6 Cycle B	Summer Term		
KEY FOCUS	**Unit 5.6 3D Modelling**	**Unit 6.5 Text Adventures**	
Prior learning – link back	Animation (4.6) • Create a stop motion animation using 2Animate • Use of art tools to create backgrounds and effects Game Creator (5.5) • Themed art • Art in 3D • Animating 3D characters	**Coding (5.1)** Familiarity with the functionality of 2Code Planning and designing for a logical outcome. **Game Creator (5.5)** Game Design planning Refining and reviewing games **Concept Maps (5.7)** Use of 2Connect in a variety of ways for different purposes **Coding (6.1)** Familiarity with the functionality of 2Code Planning and designing for a logical outcome. Debugging	
NC Objectives	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	

Nether Alderley School – Art Long Term Planning

YEAR 5/6 OBJECTIVES	• To be introduced to the 2Design and Make tool. • To explore the effect of moving points when designing. • To design a 3D model to fit certain criteria. To refine and print a model.	• 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 • To use 2Connect plans for a story adventure to make the adventure using 2Create a Story • To introduce an alternative model for a text adventure which has a less sequential narrative. To use written plans to code a map-based adventure in 2Code.	
End points (What we want the children to remember)	• To design a 3D model for a purpose	• Create their own text based adventure based upon a map	
SKILLS	• Know what the 2Design and Make tool is for • Explore how to edit the polygon 3D models Explore the possibilities of 3D printing	• Use 2Connect to record their ideas describe what a text adventure is. use the full functionality of 2Create a Story Adventure mode to create, test and debug using their plan.	
VOCABULARY	2D: • 3D:. • 3D Printing: • CAD. • Design Brief:• Net: • Pattern Fill: • Points: • Template:	Debug\ Debugging: • Function: • Link: • QR Code: • Repeat: • Sprite: • Text Adventure: • Selection: • Variables:	