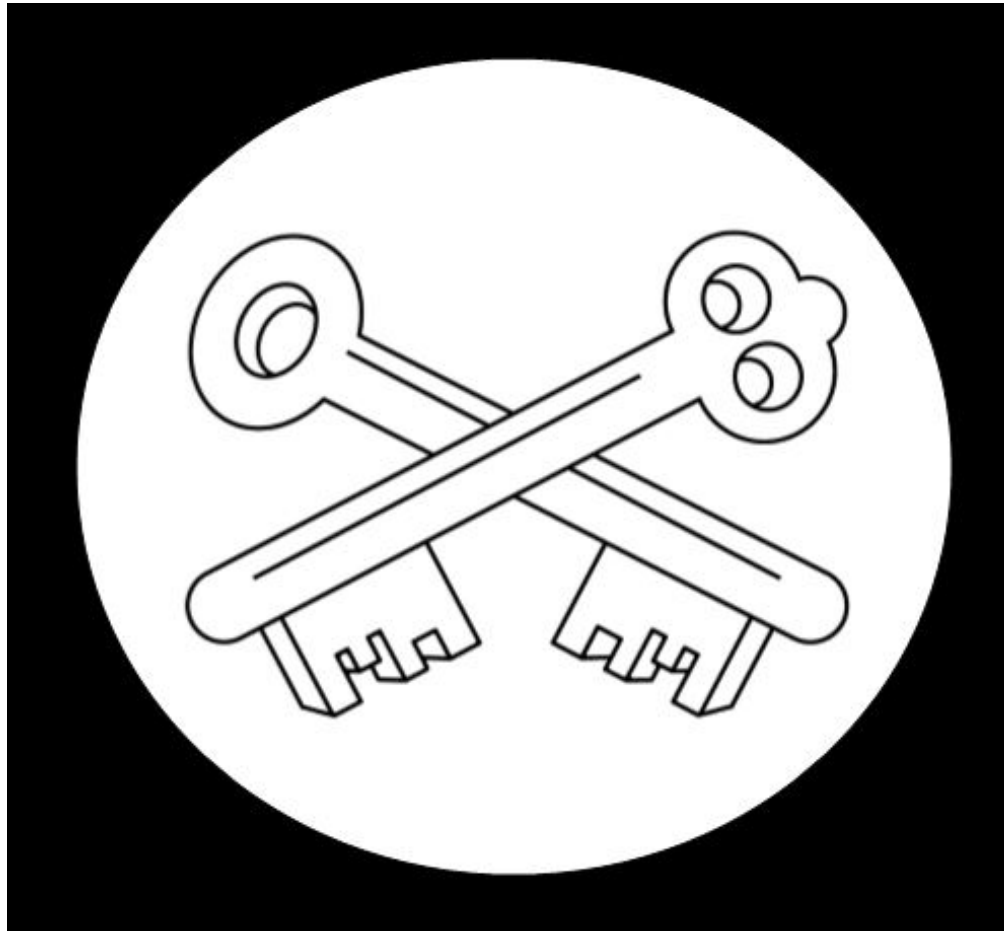


ST PETER'S C OF E JUNIOR SCHOOL



COMPUTING CURRICULUM

CONTENTS

St Peter's Curriculum

Purpose and rationale

Yearly overview

Big ideas and concepts

Progression map

Unit planners

ST PETER'S CURRICULUM

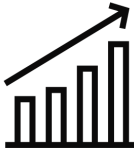
In order for our pupils to truly flourish, we believe in providing an education for the head (academic excellence), heart (character and wellbeing) and hands (making a difference). As a result, our curriculum aims to bring together powerful and culturally-rich knowledge, real opportunities to shape the world alongside developing and growing our pupils as happy and virtuous individuals.

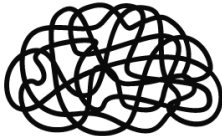


		
Head	Heart	Hands
We believe that knowledge and cultural literacy matters; creating a better world, starts with understanding this one. Our curriculum introduces the 'great conversations of humanity' - knowing who we are and where we have come from - our rich history, the foundations of scientific discovery, the great ideas of the past. However, we do not believe in simply passing on knowledge; it is also about	Heart is about ensuring our pupils are not only happy, but are able to fulfil one's potential. This requires the acquisition and development of virtues: the traits that sustain a well-rounded life and a thriving society. As a result, we aim to develop confident and compassionate students, who are effective contributors to society, successful learners, and responsible citizens.	The Hand is where pupils can do meaningful work. The world needs leaders who can change the world for the better. Our curriculum will empower and inspire our children to go out into the world and make a difference in their own life and to others. For if we want our young people to shape the world rather than just accept it the way it is, they need to be provided with problems to solve,

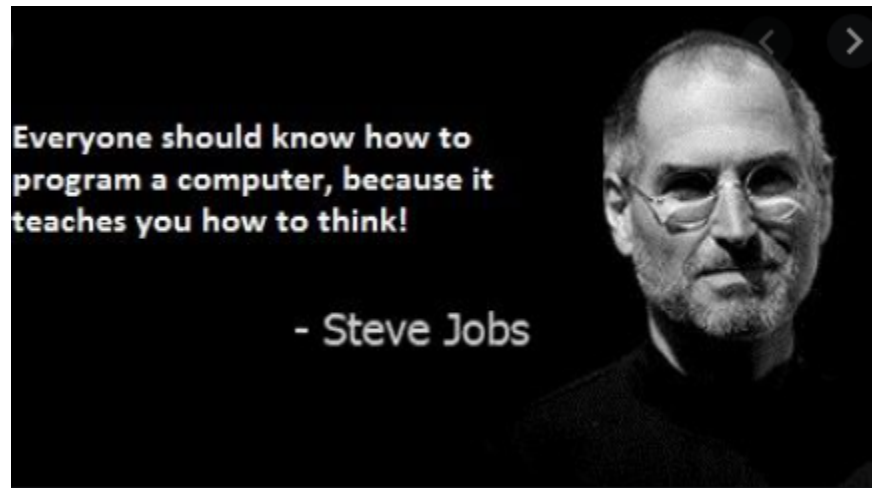
empowering knowledge, making meaning of knowledge, using it, applying it and challenging it.		projects to work on and learn how to be active citizens.
--	--	--

In order to fulfil these curriculum aims, we have eight key principles that underpin the design of our curriculum:

			
Broad and Balanced	Big ideas	Clear progression	Meaningful
In order for all our pupils to flourish, the curriculum at St Peter's will promote intellectual, moral, spiritual, aesthetic, creative, emotional and physical development as equally important.	Our curriculum will be designed to enable our pupils to begin developing an understanding of the big ideas and concepts which shape the world. There will be a subject specific rationale for all content choices.	Each subject domain will be carefully planned out, structured and sequenced to ensure progression and clarity over what 'getting better' at the subject means. As a result, our curriculum will become our progression model.	Our curriculum aims to be engaging, interesting and motivating for our pupils. We want our curriculum to get pupils interested in things they never knew they were interested in.

		
Memory in Mind	Vocabulary-rich	Empowering Knowledge
Our curriculum will take into account how children learn. To this end, we will place particular importance on ensuring that it supports pupils to retain core knowledge.	The brain does not make much of a distinction between reading about an experience and encountering it in real life; the same neurological regions are stimulated. As a result, a focus on reading and vocabulary is key to learning and remembering.	Our curriculum will be built around powerful, culturally-rich knowledge. However, it will not just focus on the passing on of this knowledge but will also be about making meaning of this knowledge, using it, applying it, and challenging it.

PURPOSE AND RATIONALE



We want children to leave St Peter's enthusiastic, confident and safe when using digital technology to enhance their lives in a wide variety of ways.

We aim to provide opportunities for our children to understand some of the many applications of Computing technology in the world of work, entertainment, communication and innovation. We want the children to understand that many curriculum areas can be enhanced using digital technology.

We want our children to understand that many of their talents in other curriculum areas can be enhanced using digital technology.

At St Peter's we aim to give the children sufficient experiences with a range of digital devices and software to develop their ability to choose the correct tool, device, software or app to achieve a particular outcome independently.

We want our children to have their education enriched by accessing the internet safely. We want our children to understand the risks and potential dangers that can occur when working online. We want our children to be resilient, thoughtful, considerate, creative, healthy users of the internet. We want our children to understand the power of the internet – both positive and negative.

Unit	Why this? Why here?
Year 3 Autumn 1 Creating pictures using a range of tools in 2Paint-a-Picture	In the first term at St Peter's the aim of this first unit is to ensure they children develop their mouse, drag and drop and clicking skills. In addition, they need to learn how to save their work efficiently in order to retrieve it later. The children also begin to develop their understanding of the school's intranet, specifically the difference between their 'Base' drive and the 'Apps' drive on the school network.
Year 3 Autumn 2 Formatting and combining digital images and text using PowerPoint	This second unit builds on the children's knowledge and skills of saving and retrieval from the previous unit as they learn how to locate and insert various images from the school's network into a PowerPoint document. This unit also introduces image and text formatting skills that the children will go on to use all the way through KS2
Year 3 Spring 1 What is an algorithm Using 2Go	In this unit the children are introduced to the term <i>algorithm</i> and how algorithms underpin all programming concepts in Computer Science. The aim of this unit is to develop the children's understanding of how to sequence clear, unambiguous instructions for a given task and how to evaluate their success and fix 'bugs' in their algorithms.
Year 3 Spring 2 Event handling and repeat loops	This unit reinforces the children's previous understanding of sequencing in algorithms and goes on to introduce the concept of repeat loops and how they can be used to make an algorithm more efficient. The children are taught an initial lesson in using Scratch which paves the way for the programming activities that they meet in year 4 and uses the 'wait' block to control when various events happen.
Year 3 Summer 1 Data Handling – Pictograms & working with a database	The aim of this unit is to explore how useful computers are at handling large amounts of information, 'data', quickly. The children learn how to present information in pictograms which lays the foundations for the Year 4 Data unit, where the children create a range of different graphs using Excel. In addition, the children are introduced to the concept of databases and they then create and investigate their own database and use it to answer a range of questions.
Year 3 Summer 2 Presenting information for a purpose	In this unit the children learn how to format text on a PC which contrasts with how this is done using various apps on an iPad. The children write a letter to their future year 4 teacher and create a digital e-book for younger children. With these tasks the children are encouraged to critically evaluate their effectiveness in how technology has been used to meet the needs of their audience.

Year 4 Autumn 1 Combining Text & images using Publisher & PowerPoint	The aim of this unit is to revise and reinforce the skills and understanding taught in year 3 on how to navigate the school network in order to save and retrieve documents. It secures a knowledge of how to insert images from various sources into a document with the purpose of the final document at the forefront of choices made. The children consolidate and extend to their own image and text formatting skills.
Year 4 Autumn 2 Sequencing animations in PowerPoint	The purpose of this unit is to introduce the key features of PowerPoint, specifically how to animate text and images. Many Computational concepts and attitudes are covered by tasking the children to create an animated sequence; concepts such as sequencing, event handling, evaluation and debugging.
Year 4 Spring 1 & 2 Programming with Scratch	This unit builds on the children's experiences of algorithms and sequencing that they covered in year 3. The children explore how various inputs can trigger different events and outputs using the 'if ...then' blocks to develop children's understanding of the concept of selection. The children also deepen their understanding of repeat loops that they began in year 3, including using a 'forever loop' to repeat continuously. Their understanding of the programming concepts is assessed using Code.org
Year 4 Summer 1 Data Handling using Excel	Continuing from the Year 3 unit on data, in year 4 the children create a wider range of graphs using Excel in readiness for using Excel to make spreadsheets in year 5. They learn how to search a database and how to collate data efficiently.
Year 4 Summer 2 Recording & editing sound	This unit introduces the children to basic formatting of sound files using Audacity. They learn how to clip and edit voice recordings and how to change the pitch and amplification of these voice recordings. This precludes the year 5 unit on Audacity which moves on to sourcing and adding sound effects and further features of the software.
Year 5 Autumn 1 Using Hyperlinks	The children further explore different types of presentation; specifically using hyperlinks to create a nonlinear presentation. The children also explore game design and the concept of selection by creating a quiz using PowerPoint in which different inputs create different outputs depending on the actions of a player.
Year 5 Autumn 2 What is a Computer	In this unit the children deepen their understanding of computer hardware, specifically identifying the basic components and input and output devices and understanding their function. The children are then given a choice of what software to use to best present their learning.
Year 5 Spring 1 Programming for Art	The focus of this unit is to consolidate and build on the use of 'repeat loops' in programming covered in year 4. The children explore how Scratch can be used to create art. Various geometric patterns are generated using loops and nested loops. This unit supports the children's learning in Mathematics.

Year 5 Spring 2 What is a variable?	Continuing from the previous term, Year 5 move on to what is and how to use variable in their programs. A variable is storage space within a program that can store a value/letter/word and this value can be changed as the program runs. A variable can be used in a huge number of ways. Initially Year 5 will be making a Score, time and Speed variable.
Year 5 Summer 1 Spreadsheets	This unit introduces the purpose of spreadsheets and how they can be used to explore different options and scenarios. This lays the foundations that is developed further in the year 6 Spreadsheet unit. The children also have the opportunity to explore a database and to answer enquiries.
Year 5 Summer 2 Sound editing	In this unit the children revisit what they learned in year 4 about recording and editing sound. They then explore this further by finding and saving various sound effects from the internet and inserting these into their voice recordings, along with other special effects such as adding an echo.
Year 6 Autumn 1 Game design & event handling using PowerPoint	This unit consolidates all previous learning in presenting information for a purpose, with the user at the core of all design choices. The children revise their knowledge of PowerPoint, combining animations, sound and hyperlinks to create a playable game. This unit also complements the Programming units, as it provokes the children to constantly evaluate their projects in terms of whether they work as a game. Many Computational concepts and skills are covered such as sequencing, selection, evaluation, decomposition and debugging.
Year 6 Autumn 2 Data Handling using Excel	This unit is taught in the autumn term to complement the Enterprise topic the children cover in preparation for the Christmas fair. The children learn how to use several basic Excel formulas to calculate profit and loss in their enterprise projects.
Year 6 Spring 1 What is a variable?	Using Scratch, the children are introduced to the concept of 'variables' in programming and how they can be used in a range of different programming projects, such as adding a score or speed to a scratch project.
Year 6 Spring 2	In this last term of programming with Scratch the children look at using 'if ...then' and 'if ...else' blocks to create quizzes in which different sets of events can be triggered by different responses of the user/player. This will also require pupils to draw on their knowledge of how to use 'variables' from the previous term and 'broadcasts' from the previous year.
Year 6 Summer 1 What is the Internet?	In this unit the children learn what a network is, the basic function of web browsers, search engines, routers, network switches and the difference between the internet and the World Wide Web. Having a basic understanding of the internet and how it works will help children have a greater understanding of the power of the internet, both positively and negatively. The summer term before the children move on to secondary school is an ideal time to increase their understanding of the wider digital world.

**Year 6 Summer 2
Word Processing &
Presenting**

In this final word processing task the children are asked to research and design their own CV. It looks at using higher order graphic design skills and word processing skills to produce a document that is eye-catching and professional in its finish.

COMPUTING CURRICULUM OVERVIEW

	Autumn 1	Autumn 2		Spring 1	Spring 2		Summer 1	Summer 2	
Y 3	ICT: Saving and retrieving work Mouse Skills Using various graphic tools to create pictures using 2Paint-a-Picture	ICT: Combining text & images Formatting text & images using PowerPoint & Publisher		Algorithms Sequencing Abstraction Debugging Predicting 2Go	Repeat loops, Sequencing & debugging Beginners Scratch Code.org		Data Handling Creating pictograms Creating and interpreting databases	Formatting text Word Processing Skills Word Letter writing	
Y 4	ICT -Basics Manipulating and formatting text & images using Publisher & PowerPoint – Bunting Super Hero Picture	PowerPoint animation. Sequencing animation instructions to create an animated sequence.		Triggers & Event handling using 'if ...then' blocks Scratch:- Underwater world animation Use of 'forever loop'	Sequencing Repeat Loops Code.org		Data Handling Using Excel to create Graphs, access and present information, investigate databases	Sound: - basic introduction to editing digital sound, voice recordings, using Audacity	
Y 5	Event handling in non-linear presentations PowerPoint Hyperlinks to link user to different points in a document. PowerPoint game	What is a computer? Identifying basic computer components and their function Identifying various input & output devices		Creating Art with Scratch Using repeat Loops & pen tools:- drawing 2D shapes & pattern.	Programming- What do 'broadcasts' do? Using broadcasts as an input to control specific events/outcomes Code.org		Data Handling Introduction to Spreadsheets and formulas to make budgeting decisions. Searching a database	Sound editing. Audacity:- adding sound effects found on the internet Changing the sound pitch, amplitude and other effects	
Y 6	Game Design & Event Handling Using a wider range of inputs to trigger different events/animations	Data Handling Adding formula to Spreadsheets to help make decisions and calculate profit and loss		Event handling What is a Variable? How variables are used in programs to control events such as score, time, speed etc.–	Selection/conditionals Programming for 3 different possible outcomes Using 'ask' variable & 'Ifthen' and 'ifelse' blocks to create a quiz on Scratch		What is the Internet? Understanding how internet, world wide web & search engines work	Word processing High level formatting skills Researching and creating a CV using Microsoft Word	

BIG IDEAS AND CONCEPTS

ICT Curriculum

Image How to capture, edit and format digital images.	Film How to capture & edit film for different effects and purposes	Sound How to record, create, compose, edit, source & save digital sound.
Saving & Retrieving Basic understanding of a network & file system. How to organise and save their work in a sensible way to make searching & retrieval easier.	Typing & Mouse Skills Secure knowledge of the basic functions of the keyboard, including shift, tab, Ctrl, backspace etc. Typing and mouse skills will be refined each year.	Research Searching the internet, browsing websites and evaluating online information for safety and reliability.
Presenting Apply image, film, sound, typing and research skills in different forms of presentation to communicate effectively to an audience. E.g. posters, reports, documents, articles, slide shows, animations, films...	Evaluating Evaluate their use of technology in communicating their findings or messages to an audience, reflecting on how appropriately and effectively their final work has been in achieving its purpose.	Data Use digital devices to present numerical data in graphs or charts to make the information more easily accessible to the reader. Use spreadsheets, formulas, tables and graphs to aid calculations, models and investigations in science and maths.

COMPUTING KEY CONCEPTS

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3					
ICT: Saving & retrieving work Mouse Skills Logging on/off	ICT: Formatting text, shapes & images using PowerPoint & Publisher	Computer Science What is an algorithm? Sequencing, Predicting, debugging Introduction to Scratch		Data Handling Creating & interpreting pictograms and databases	Text formatting Alignment & editing Online Safety
Year 4					
ICT -Basics Formatting text & images. Inserting images from different sources	PowerPoint animation. Sequencing animation instructions to create an animated sequence.	Event handling Conditional selection using 'if ...then' Scratch blocks Scratch:-	Event handling Logical sequencing	Data Handling Investigate and present information, in graphical form. Using a database	Sound: Editing digital sound, using Audacity Online Safety
Year 5					
Event handling in non-linear presentations Hyperlinks to link user to different points in a document/web page.	What is a computer? Identifying basic parts of computer system and components and their function	Creating Art with Scratch Using repeat Loops & pen tools:- drawing 2D shapes & patterns.	What is a Variable? How variables are used in programs to control events such as score, time, speed	Data Handling Introduction to Spreadsheets. Adding formulas to make budgeting decisions. Searching a database	Sound editing. adding sound effects from internet Changing pitch, amplitude & echo Online Safety
Year 6					
Game Design & Event Handling Using wide range of inputs to trigger different events or animations Game Design	Data Handling What is a Spreadsheet? Adding further formula to Spreadsheets to help make decisions and calculate profit and loss	What does a 'broadcast' do? Using broadcasts as an input to control specific events/outcomes	Conditional Selection Using 'ask' variable and 'Ifthen' and 'ifelse' blocks to create a quiz on Scratch	What is the Internet? Understanding how internet, world wide web & search engines work	Word processing High level formatting skills Online Safety

PROGRESSION IN ICT

		Year3	Year4	Year5	Year 6
I M A G E S	Knowledge & Skills	· Create a digital image using a variety of brush types, pen tools and effects. · Format image using crop, resize, flip, fill, rotate & background removal tools · Use copy and paste to create duplicate identical images. · Insert or paste an image from different sources	· Enhance digital images and photographs using crop, brightness, contrast, resize & background removal tools. · Use <i>group tool</i> to copy and paste several items simultaneously. · Know and use shift key create regular shapes · Use snipping tool to capture images from different sources · Animate images for emphasis	- Take a digital photo using appropriate camera/device settings (macro/ sport mode) - Layer images & text for a desired effect - Enhance digital images and photographs using crop, brightness, contrast & resize tools or remove background	· Consolidate prior learning · Edit picture to remove items, add new backgrounds, and merge 2 photos. · (Discuss photoshoping in the media-fake news/ celeb photos and body image)
	Vocab	Insert Copy & paste Crop/resize/rotate/flip/crop fill select	Format/rotate/crop/flip Group/ungroup Shift key Brightness contrast snipping tool	Layer 'bring forward' Send backwards Remove background	Photoshopping Airbrushing

F I L M	Knowledge & Skills	· Record & playback short film · Sequence clips onto a timeline. · Begin to add titles and transitions. · Cut/Trim video · Use green screen techniques (with support)	· Add titles and transitions · Add music and sound effects · Use green screen techniques (with support) · Create a stop frame animation or use an animation app to create an animation	· Edit clips · Film with a buffer either side of the video clip · Adjust timings · Add a film clip to larger presentation	· Create a video using appropriate tools and techniques to create an atmosphere/ mood (eg. Road safety WWII) · Edit & enhance the video using skills gained in previous years
	Vocab	Cut / Edit Transitions Titles & credits	Transitions Titles & credits Time line	Video file types	Atmosphere

S O U N D	Knowledge & Skills	· Create and edit purposeful compositions using music software (eg create a mood or in a certain style) · Record and playback voice recording for narration of a story or non-fiction text · Voice recording- Dictate story or writing prompts	· Make a sound recording of voice or music, select and delete unwanted sections · Add sound effects for a purpose (eg. to use in a coding animation or game)	· Add a voice over to a film or presentation and edit sound clips e.g. change volume, pitch, speed. Add an echo or fade in & fade out effects. · Record or find sound effects on the internet which can be saved and imported into their own projects.
	Vocab	Record Playback Rewind Pause	Edit Pitch Amplify Export Import 'Save project as'	Echo Fade in Fade out Reverse Amplify Pitch

R E S E A R C H	Knowledge & Skills	· Locate a webpage using a URL (web address) · Use Google or similar to search for a specific website, information or images · Find, copy or save appropriate images/ text from the internet and paste or insert into their work.	· Skim and scan search engine results and look at their web address to evaluate usefulness. · Copy notes on a topic from the internet into a document. Show 2 windows side by side to enable copy and pasting from one document to another.	· Use advanced search techniques, eg. Image size/ type key words. Eg Google image search tools · Use snipping tool to capture parts of a webpage · Add web page to favourites	Internet Explorer Chrome Search engine File size File type
R E S E A R C H	Vocab	Internet Website Webpage Search engine World wide web Network Web address URL	Internet Google Website / Webpage Search engine World wide web Network Web address URL	Web browser Chrome/Google Search engine File size Thumb nail File type	Revise all previous vocabulary

P R E S E N T I N G	Knowledge & Skills	· Format text - changing the appearance, alignment of text to suit a purpose · Add borders and other effects (shadow/ glow) to digital images & text boxes. · Use cut, paste and delete to organise text and images · Animate images for emphasis · Use a spell check.	· Combine and organise digital images, text & sound files from various sources, for a desired effect or purpose · Add animations to images & text for a desired effect or emphasis · Add transitions between slides to a presentation · Use a spell check and thesaurus.	· Combine & organise digital images, text & sound files from various sources, for a desired effect or purpose · Use a colour scheme, theme or design for a presentation · use the grouping tool for greater efficiency when copying. · Create a non-linear, multimedia text with hyperlinking. · Begin to understand different file types e.g. image file, sound file etc	· Consolidate previous learning. · Plan and create a presentation for a more sophisticated purpose · Format text to suit a purpose (alignment tab, justify, bullet points) · Choose the most suitable applications and devices to communicate to a specific audience
	Vocab	Spell check Copy/Paste Font size, bold, underline, bullet points Highlight/select Border Text box	Cut, copy & paste/ insert Text wrap Thesaurus/spell check Align text Transition Animate/animation pane	Animation / transition Hyperlink File types Group/ungroup margin / line spacing design/ theme	(see previous years) Format Tab function Justify Text alignment

D A T A	Knowledge & Skills	· generate pictograms and bar charts · answer simple questions by sorting a field. · answer simple questions by using search criteria. · Add a record to a digital database.	· Use online databases to search for information (eg. Online holiday listings, online shopping) · Present numerical data in graphical form or table · Use a digital devise to collect data as part of a survey.	· Present data in a wider range of graphs and charts for different purposes · Work with pre-made spreadsheet. Understand how spreadsheet can help to solve problems, make decisions, and answer 'what if' questions · Use simple formula such as SUM and cost x quantity calculations	· create tables of results. · Create graphs from spreadsheets. · Enter data and formulae into cells, modify the data, make predictions of changes and check results. · Create and use a spreadsheet to work within a budget. · Use formulae to make profit & loss calculations
----------------------------	-------------------------------	---	---	---	--

	Vocab	Data Table/graph Bar chart/ pictogram Database sort	Pie chart Search / find Sort Chart title X & y axis survey	Excel Cell Spreadsheet Formula Sum Budget	Consolidate all learning from previous years
--	--------------	---	---	--	--

Typing & Mouse Skills	Knowledge & Skills	· Consolidate KS1 concepts · Use cursor/touch to find the letter/word to delete with backspace · Use 'space bar', 'delete', 'backspace', 'enter', 'shift' key 'cap locks' key correctly.	· Work with 2 windows snapped to the sides of the screen when finding information · Use keyboard shortcuts for cut, paste and delete	· Use Ctrl key to select more than one object · Use keyboard shortcuts for cut, paste and delete	· Touch type with increasing speed by placing index fingers on home keys (f/j) use fingers to reach for top line keys and lower line keys.
	Vocab	Mouse/cursor Monitor / keyboard Spacebar Backspace/ delete Shift key / Cap locks Copy/paste Enter key Double click Drag/drop Select/highlight	Right click Windows File Document Shortcuts Arrow keys Scroll	Ctrl key tab Windows key Print screen escape	Consolidate all previous learning.

Saving & Retrieving	Knowledge & Skills	· Save work on the school network, overwriting previous versions or renaming different versions. · Open a file on the school network	· Independently navigate the network and folders confidently and save consistently. · Search files and folders, sort by date · save on server (different edited versions with a different name to provide evidence of evaluating and modifying work) · Understand that you can save as different file types. · Onedrive, dropbox · save to camera roll and transfer to computer
--------------------------------	-------------------------------	---	--

	Vocab	Save / Open Search Network Server File / Document Icon Share Airdrop Upload / download	Browse Upload Download Share Select Capture Airdrop
--	--------------	--	---

Evaluating	Knowledge & Skills	· Evaluate look of final document e.g. good choice of font, colours & spacing etc? · Adapt colours/fonts/sizes of images before reprinting · Evaluate the document in terms of spacing of the text and images and how easy it is to read text.	· Plan and keep to a specific style, theme or design - are the fonts, colours, layout appropriate and effective for content and audience? · Evaluate use of space in a document and ease of reading	· As year 4 but over a wider range of tasks, topics and audiences. · Is information accessible/ appropriate to the reader?	· Evaluate another's presentation on the basis of content and appropriate style. · Refine the quality of presentations as a result of peer review. · Give feedback on the effectiveness of the presentations of their peers.
-------------------	-------------------------------	--	--	---	--

KEY CONCEPTS, SKILLS AND APPROACHES TO PROGRAMMING

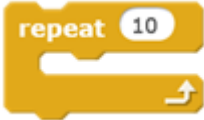
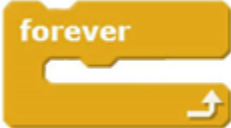
These are the overriding themes and approaches that under-pin all programming.

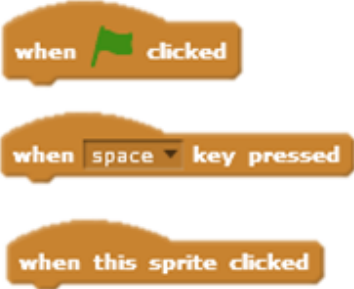
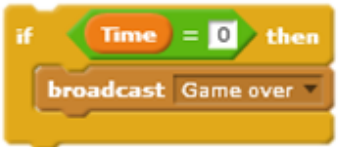
LOGICAL REASONING Predicting and analysing Use logical reasoning to work out why something happens. Part of logical reasoning is the ability to use existing knowledge to make reliable predictions about future behaviour of a system.	PATTERN SPOTTING Spotting and using similarities By identifying patterns we can make predictions, create rules and solve more general problems. Children need to be able to identify repeating patterns in a list of commands to understand how this could be made more efficient using a repeat loop.	DECOMPOSITION Breaking down into parts The process of breaking down a problem into smaller manageable parts is known as decomposition. Abstraction Removing all unnecessary detail
DEBUGGING Finding and fixing errors Errors in algorithms and code are called 'bugs', and the process of finding and fixing these is called 'debugging'. Getting pupils to take responsibility for thinking through their algorithms and code, to identify and fix errors is an important part of learning to think and work like a programmer.	EVALUATING Making judgements Evaluation is about making judgements, in an objective and systematic way where possible. Children need to evaluate the effectiveness of their programs in solving a specific task. Pupils should be encouraged to reflect on the quality of the work that they produce – is it fit for purpose?	TINKERING We want to develop in children a willingness to experiment and explore a new app or new software. Children should be encouraged to 'play' with a new piece of software, sharing what they discover about it to one another, rather than always coming to the teacher for the answers. Pupils can explore how to use others' code as a starting point for their own programming projects. Tinkering should help develop independence and perseverance when working with technology.

PROGRESSION IN COMPUTING

		Year 3	Year 4	Year 5	Year 6
S E Q U E N C I N G	Knowledge & Skills	- Understand that a sequence of instructions needs to be clear, precise and unambiguous. - Sequence instructions in the correct order with increasing number of commands. This is called an algorithm - Understand that the order of instructions in an algorithm will affect the outcome. - Amount of turn is given as a number of quarter turns, not in number of degrees. Predict the outcome of an algorithm. - Use symbols to represent an instruction	- Sequence instructions in the correct order to create an animation sequence, draw a shape or solve a problem. - Understand that the direction and amount of turn is relative to the position of object – on screen or in real life – that is being moved. - Amount of turn in an algorithm to be given as a number of degrees. - Be able to interpret and evaluate the effectiveness of an algorithm written by their peers in class. Predict the outcome of an algorithm.	Understand and use algorithms which include: - Repeat loops - Event handling - Selection	Understand and use algorithms which include: - Repeat loops - Event handling - Selection - Variables
	vocab	Algorithm Sequence /order Instruction predict debug	Algorithm Sequence Instruction Predict Evaluate & debugging	Algorithm Sequence Instruction Evaluate & debugging Trigger & event	Revise previous vocabulary

O U T P U T	Knowledge & Skills	- Understand when creating an algorithm, we start by thinking about what outcome we want. - What do we want it to do. - Understand that 'output' is the result of a trigger such as pressing the play button. - Understand that outcomes using digit devices can vary. Outputs can be sound, movements, what you see on screen	When planning for a desired outcome you will need to decompose the task to know what output do you want and where is the best place to start.		
	Vocabulary	Output event	Output decompose	Output decompose	Output decompose

R E P E A T L O O P S	Knowledge & Skills	Interpret and understand informal notation for showing a move is repeated. E.G [→] x 3 = move right 3 times. Pattern spotting – be able to identify which commands need to be repeated and how many times to achieve a desired end or pattern.	Understand what simple loops and repeats are and how they can make a program more efficient.  Create and record an algorithm of their own which includes a repeating element. Forever loop, once started, will not stop until program ends. 	Conditional loops Use repeat until ... with a sensing block (light blue blocks)  Read, write and debug nested loops -loops inside loops. e.g. creating an algorithm to draw a square, then put this algorithm inside another loop to create a repeated pattern. 	Use a variable and operators (the green blocks in Scratch) within a loop to govern termination: e.g. Repeat until time = 0 or  x coordinate is bigger than 180 
	Vocab	Pattern Repeat 3 x = 3 times	Loop Repeat loop Repeat forever = continuous	Repeat loop Repeat until ... Nested loop	Repeat loop Repeat until ... bigger than / smaller than Nested loop
I N	Knowledge & Skills	Be able to create an animation or game where clicking on	Know that a range of inputs will start an event e.g. space	Co-ordination & synchronisation	Use a variable to trigger different events such as: in

P U T S		certain inputs will trigger an event. E.g. animations in PowerPoint There can be many different inputs such as pressing space bar, arrow keys, clicking sprite etc Parallelism – Causing more than one event to happen at the same time e.g. having more than one set of blocks or instructions running at the same time.	bar, mouse click, press play/go (Use brown 'hats' in Scratch) 	In Scratch use a broadcast to co-ordinate events in a program with more than one sprite (one event causes another to happen) 	Scratch sending a broadcast in Scratch to other sprites. 
	Vocab	Input trigger event right click arrow keys	Input Trigger Event sprite	Input event trigger Broadcast	Input Event Trigger broadcast
S E L E C T I O N	Knowledge & Skills		Understand that 'selection' means different conditions trigger different events in a program. Using the 'If /then' and 'If/Else' blocks. Use sensing (turquoise blocks in Scratch) to make selections. Condition starts action 	Condition can switch between actions Use 'if, then, else' statements e.g. in a quiz: if answer correct... 	Use conditional selection to govern different events using the 'if / else' blocks, green blocks and a variable. 

	Vocab		If ...then Sensing blocks Condition selection	Ifthen If ... else Sensing blocks Condition selection	Ifthen If ... else Sensing blocks Condition selection
V A R I B L E S	Knowledge & Skills			Understand that variables are a space in a program which can store data- numbers or text – this data can change as the program runs. (E.G. orange blocks in Scratch). Variables can only store on variable at a time.  Empty variable and give it a new value  Charge the value of the variable as the program runs.	Develop understanding of variables and how they can control events in a program.  Change the variable in a loop
	Vocab			Variable Storage Data “ask” variable	Variable Storage Data Assign a value Ask variable

ONLINE SAFETY CURRICULUM

	Year 3	Year 4	Year 5	Year 6
Lifestyle & Health	Protecting Ourselves Know who to tell if concerned about content or contact online	Being Healthy Online Screen time - what is a healthy balance between online/offline sleep Age appropriate activity	Protecting Ourselves Demonstrate use of online services and technologies and know a range of ways to report concerns	The ideal versus the real Image editing - photoshopping, positive and negative effects Gender issues and stereotyping
Relationships	Friendships online - Pupils explore the similarities and differences between in-person and on-line communications and friendships. Understand which information is safe to share online and what is not.	Cyberbullying Being just as kind online as in person Being an upstander Social isolation from online groups or communities	Online Reputation and our Digital Footprint What does what you post/share/like say about you?	Social Media What is appropriate Risks Image rights When is it ok to share a picture
Living in the Wider World	Passwords Pupils explore reasons why people use passwords, learn the benefits of using passwords, and discover strategies for creating and keeping strong secure passwords.	Apps & Games Understand that games and films have age ratings and what this means	Commercial Risks Who pays for the internet? Advertising In- app purchases What is Spam? Websites saving credit card numbers	What is Fake News? Motivation and bias in the media Validating information How to determine which websites are trustworthy
Literature with an online theme	Chicken Clicking by Jeanne Willis Tek: The Modern Cave Boy by Patrick McDonnell	But it's Just a Game by Julia Cook Nerdy Birdy Tweets by Aaron Reynolds	Troll Stinks by Jeanne Willis	Goldilocks A Hashtag Cautionary Tale by Jeanne Willis

END POINTS

By the end of KS2, pupils should be able to:

- 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
- 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
- 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.

CURRICULUM UNIT PLANNER

Unit:	Creating Graphic images using 2Paint a Picture	Year:	3	Term:	Autumn 1
-------	--	-------	---	-------	----------

Links to prior learning

Any previous experience of working on a PC or laptop in KS1 - Mouse & keyboard skills,

New learning

In the first term at St Peter's the aim of this first unit is to ensure they children can log in to a PC in the computer suite using the 'base...' log in for their class. They need to develop their mouse, drag and drop and clicking skills. In addition, they need to learn how to save their work efficiently in order to retrieve it later. The children also begin to develop their understanding of the school's intranet, specifically the difference between their 'Base' drive and the 'Apps' drive on the school network.

Preparation for future learning

Logging on & off
Basic saving and retrieval, mouse & keyboard skills

Key vocabulary		
Log on/ log off Drag/drop Click /double click Server Shut down	Fill tool Save /open File/file name	Cursor Mouse Keyboard Monitor headphones

Big ideas and key concepts

How to:

Log on and off a PC in the computer suite

Control a mouse and make on-screen selections by clicking

Drag n drop

Save a document in their own folder on the school network with a suitable name for their document so that it can be opened later.

Children need to be introduced to the concept that the school has a school network controlled by a special computer called a server. On the server they have a virtual classroom called base1

Basic mouse skills to aid efficiency when using a PC

Assessment opportunity

Work scrutiny at the end of each lesson and at the end of the topic - have the children successfully saved their documents in their files with suitable names for each document?

What teachers need to know

How to find and use 2Paint-a-picture by 2Simple

Unit:

Combining and formatting text and digital images using PowerPoint

Year:

3

Term:

Autumn 2

Links to prior learning

Logging on with the correct base number on to the school network

Being able to find and open a file on the school network.

Mouse & keyboard skills.

New learning

In this second unit the children learn how to locate and insert various images from the school's network into a PowerPoint document. This requires the children to learn how to open a new PowerPoint document and insert images that are saved in different places on the school's network.

This unit also introduces image formatting skills that the children will go on to use all the way through KS2

Some children will learn how to right click and copy and paste images

Preparation for future learning

Saving and retrieval, mouse & keyboard skills

Inserting images

Copy and paste skills

'Right clicking' to access more menus

Formatting images, e.g. resizing, rotating, flipping

Key vocabulary

Drag/drop	copy/paste
Click /double click	Right click
Cursor	Flip
Mouse	Rotate
Keyboard	Resize
Fill tool	Layer
Save /open	Background removal
File/file name	

Big ideas and key concepts

Saving documents in a suitable place with a suitable name for your document so that you can find it and open it at a later date.

Basic mouse skills to aid efficiency when using a PC

Assessment opportunity

Work scrutiny at the end of each lesson and at the end of the topic - have the children successfully saved their documents in their files with suitable names for each document?

What teachers need to know

How to insert and format images in PowerPoint

Unit: What is an algorithm using '2Go'

Year: 3

Term: Spring 1

Links to prior learning

Sequencing and use of Pseudocode to write an algorithm in KS1

New learning

In this unit the children are introduced to the term *algorithm* and how algorithms underpin all programming concepts in Computer Science.

The aim of this unit is to develop the children's understanding of how to sequence clear, unambiguous, precise instructions for a given task. The children need to learn how computers will follow the algorithm exactly and therefore the algorithm needs to be fit for purpose. The children need to learn how to track and evaluate the success of their code, identify errors and fix 'bugs' in their algorithms.

Preparation for future learning

Understanding the importance of sequencing in algorithms is the basis of all programming.

Key vocabulary	
Algorithm Debug Evaluate Run Program	Right Left Diagonal

Big ideas and key concepts
What an algorithm is What debugging means The importance of putting instructions in the correct order Tracking the accuracy of your program to be able to identify errors

Assessment opportunity
On screen results of the children's programs using 2Go The responses the children give to the unplugged sessions held in the classroom.

What teachers need to know
How to use 2Simple software called 2Go An understanding of the vocabulary listed.

Unit:	Event handling and repeat loops	Year:	3	Term:	Spring 2
-------	--	-------	---	-------	----------

Links to prior learning

Sequencing and how find and fix errors in code covered in the previous half term

New learning

This unit reinforces the children's previous understanding of sequencing in algorithms and goes on to introduce the concept of repeat loops and how they can be used to make an algorithm more efficient. The children are taught an introductory project in using Scratch which paves the way for the programming activities that they meet in year 4 and uses the 'wait' block to control when various events happen.

Preparation for future learning

Understanding the importance of sequencing in algorithms is the basis of all programming.

Begin to look how repeat loops can be used in programming

Introduction the key components of Scratch

Key vocabulary

Algorithm	Right
Debug	Left
Evaluate	Diagonal
Run	Pattern
Program	Sprite
repeat	stage

Big ideas and key concepts

What an algorithm is
What debugging means
The importance of putting instructions in the correct order
Tracking the accuracy of your program to be able to identify errors
Concept of a simple repeat block and how to use it

Assessment opportunity

The responses the children give to the unplugged sessions held in the classroom.
Speed and effectiveness of initial Scratch project
Results in the online assessment tool – Code.org

What teachers need to know

How to use Scratch and 2Go software
How to make an account for the children on the Code.org website.
An understanding of the vocabulary listed.

Unit: Data Handling - creating pictograms and interpreting a database

Year:

3

Term:

Summer 1

Links to prior learning

This links to the children's experience of data handling activities in the KS 1 and in year 3 Maths lessons earlier in the year.

New learning

The aim of this unit is to explore how useful computers are at handling large amounts of information, 'data', quickly. The children learn how to present information in pictograms which lays the foundations for the Year 4 Data unit, where the children create a range of different graphs using Excel. In addition, the children are introduced to the concept of databases and they then create and investigate their own database and use it to answer a range of questions.

Preparation for future learning

This unit paves the way for the using more sophisticated software to create a broader range of graphs in year 4

Key vocabulary			
Data Graph Pictogram Axis	Vertical Horizontal Title Field	Sort Find Drop-down menu	

Big ideas and key concepts

What is 'data'?

Graphical representation of data is easier to access and interpret than columns of figures.

Computers are much quicker, more efficient and accurate at searching huge amounts of data than humans

Computers are useful for collating and sorting a range of information, both numerical and text.

Assessment opportunity

Children's responses to unplugged input sessions plus quality and sophistication of graphs produced

What teachers need to know

How to use the pictogram website and the 2Simple software 2Investigate

Unit:	Presenting information (Text and Images) for a purpose	Year:	3	Term:	Summer 2
-------	---	-------	---	-------	----------

Links to prior learning

This unit links with previous learning in Literacy on punctuation and layout of a letter. It will also draw on the ICT skills that the children covered in the autumn term.

New learning

In this unit the children learn how to format text on a PC which contrasts with how this is done using various apps on an iPad. The children write a letter to their future year 4 teacher and create a digital e-book for younger children. With these tasks the children are encouraged to critically evaluate their effectiveness in how technology has been used to meet the needs of their audience.

Preparation for future learning

Saving and retrieval,
 mouse & keyboard skills - particularly use of shift key, backspace and arrow keys.
 Finding and sourcing images from the internet.
 Inserting images
 Copy and paste skills
 'Right clicking' to access more menus
 Formatting images, e.g. resizing, rotating, flipping

Key vocabulary

Backspace Enter key Shift key Arrow keys Save /open File/file name	copy/paste Right click menu Flip Rotate Resize	Bold Alignment, right, left, centre Animation Entrance Exit Custom path
---	---	--

Big ideas and key concepts

Creating a document for a specific purpose; a letter to a teacher or an e-book for a pre-school child
 Adding animations to engage a younger reader
 Formatting text, changing font, colour
 Using tools such as spell check, thesaurus

Assessment opportunity

Work scrutiny at the end of each lesson and at the end of the topic - have the children successfully saved their documents in their files with suitable names for each document?

What teachers need to know

How to use Word and PowerPoint -specifically how to add animations to text and images.

Unit:

Creating, Combining and Formatting digital images & text

Year:

4

Term:

Autumn 1

Links to prior learning

Logging on with the correct base number on to the school network
Being able to find and open a file on the school network.
Saving and retrieval, mouse & keyboard skills
Inserting images
Copy and paste skills
'Right clicking' to access more menus
Formatting images, e.g. resizing, rotating, flipping
Online Safety - what is the procedure if an inappropriate image is seen while searching the internet

New learning

The aim of this unit is to revise and reinforce the skills and understanding taught in year 3 on how to navigate the school network in order to save and retrieve documents. It also secures a knowledge of how to insert images from various sources, including finding images from the internet, into a document with the purpose of the final document at the forefront of choices made. The children consolidate and extend their own image and text formatting skills to include removing the background of images and layering them on top of other images and editing and improving photographs .

Preparation for future learning

Sourcing images from the internet
Formatting images
Improving photographs
Formatting images

Key vocabulary

Drag/drop Click /double click Cursor Mouse Keyboard Fill tool Save /open File/file name	copy/paste Right click Flip Rotate Resize Layer Background removal Fill tool	Insert Google Brightness Contrast Crop Icon Thumbnail Text box alignment	Bold Backspace Shift key Text alignment
--	---	--	--

Big ideas and key concepts

Choosing the correct graphic design tool to creating an effect
 Selecting parts of an image and layering images
 Make design choices to suit a particular purpose/audience

Assessment opportunity

Work scrutiny at the end of each lesson and at the end of the topic -
 Have the children produced documents that fit the given criteria?

What teachers need to know

Unit:	Creating an animated sequence in PowerPoint	Year:	4	Term:	Autumn 2
--------------	---	--------------	---	--------------	----------

Links to prior learning

All previous skills and knowledge of working with PowerPoint - inserting text boxes and images into their documents.

New learning

The purpose of this unit is to introduce the key features of PowerPoint to create a presentation for a specific purpose. This includes how to animate text and images to produce an animated sequence.

Many Computational concepts and attitudes are covered by tasking the children to create an animated sequence; concepts such as sequencing, event handling, evaluation and debugging.

Preparation for future learning

Creating basic PowerPoint presentation

Thinking about the needs of the audience/how to make the information more accessible to the reader and how to guide the reader to the areas you want them to look at

Evaluating and editing skills

Key Vocabulary

Insert
Google
Brightness
Contrast
Crop
Icon
Text box

Slide
Animate
Slide show
Transition
'after previous'
'With previous'
Animation pane

Text box
Bring forward
Send to the back
trigger

Big ideas and key concepts

Creating an image effect for a given purpose
Layering images
Make design choices to suit a particular purpose
Making information accessible

Assessment opportunity

Work scrutiny at the end of each lesson and at the end of the topic -
Have the children produced a workable presentation that fit the given criteria?
Peer assessment of each other's presentations

What teachers need to know

How to add animations to a PowerPoint document

Unit: Simple Selection, Event handling and Repeat Loops

Year: 4

Term: Spring 1 & 2

Links to prior learning

Repeat loops, Sequencing and how to find and fix errors in code covered in the previous year.
Basics of the Scratch Software

New learning

This unit builds on the children's experiences of algorithms and sequencing that they covered in year 3. The children explore how various inputs can trigger different events and outputs using the 'if ...then' blocks to develop children's understanding of the concept of selection. The children also deepen their understanding of repeat loops that they began in year 3, including using a 'forever loop' to repeat continuously.

Their understanding of the programming concepts is then assessed using Code.org

Preparation for future learning

Understanding the importance of sequencing in algorithms is the basis of all programming.

How 'repeat forever' loops can be used to make something happen continuously.

Concept of simple selection is introduced using 'if ...then' blocks

Key vocabulary		
Algorithm Debug Evaluate Run Program repeat	Sprite Stage Repeat Wait selection 'If touching....then'	Costume

Big ideas and key concepts

Controlling events using the 'wait' block

Selection – 'if ...then'

'Repeat forever'

Tracking the accuracy of your program to be able to identify errors

Assessment opportunity

The responses the children give to the unplugged sessions held in the classroom.
Speed and effectiveness of initial Scratch project
Results in the online assessment tool – Code.org

What teachers need to know

How to use Scratch software – ‘if touching then’ blocks
How to make an account for the children on the Code.org website.
An understanding of the vocabulary listed.

Unit: Data Handling using Excel

Year:

4

Term:

Summer 1

Links to prior learning

This links to the children’s experience in the Year 4 data unit on create graphs and other charts but using Excel instead of the Pictogram website.

New learning

Continuing from the Year 3 unit on data, in year 4 the children create a wider range of graphs using Excel in readiness for using Excel to make spreadsheets in year 5. They learn how to search a database and how to collate data efficiently.

Preparation for future learning

This unit paves the way for the Spreadsheet units in year 5 and 6

Key vocabulary

Excel Column Row cell	Bar graph Line graph Pie chart 'find'	Horizontal Vertical axis	
--------------------------------	--	--------------------------------	--

Big ideas and key concepts

What is 'data'?

Graphical representation of data is easier to access and interpret than columns of figures.

Computers are much quicker, efficient and accurate at searching huge amounts of data than humans

Assessment opportunity

Children's responses to unplugged sessions plus sophistication of graphs produced

What teachers need to know

How to create simple graphs in Excel

Unit: Recording & Editing Sound

Year:

4

Term:

Summer 2

Links to prior learning

This unit on sound parallels the units the children have been taught on editing images. This topic will reinforce the children's understanding of how files are stored and retrieved

New learning

This unit introduces the children to basic formatting of sound files using Audacity. They learn how to clip and edit voice recordings and how to change the pitch and amplification of these voice recordings. This precludes the year 5 unit on Audacity which moves on to sourcing and adding sound effects and further features of the software

Preparation for future learning

This unit paves the way for the Audacity units in year 5 and will be useful when creating multimedia presentations in the future.

Key vocabulary			
Audacity Play Record pause	Clip/crop Highlight Amplify pitch	Mute Headphone Speaker Clipping Save project as	tempo

Big ideas and key concepts

How to record sound, voice clips using Audacity
Sound files are similar to image files, they can be cropped flipped stretched etc
We can edit sound files - e.g. change the pitch, tempo, amplification etc,

Assessment opportunity

Peer and self assessment of the abilities to create a sophisticated recording.

What teachers need to know

How to use Audacity to format digital sound recordings
How to find sounds on the find sounds website

Unit:

Creating a non-linear presentation with
hyperlinks using PowerPoint

Year:

5

Term:

Autumn 1

Links to prior learning

All previous skills and knowledge of working with PowerPoint - inserting text boxes and images into their documents. Importance of thinking about the needs of the audience when planning a presentation.

New learning

The children further explore different types of presentation; specifically using hyperlinks to create a nonlinear presentation where the reader of the presentation can navigate to any page in the presentation from the menu/home page. The children also explore game design and the concept of selection by creating a quiz using PowerPoint in which different inputs create different outputs depending on the selections of a player.

Preparation for future learning

How to use hyperlinks to link to slides, files or web pages will be useful in future presentations.
Basic knowledge of how to combine text and images to create a PowerPoint presentation
Thinking about the needs of the audience
Evaluating and editing skills

Key Vocabulary

Insert Google Icon Thumbnail Text box Alignment Border	Slide Animate Slide show Transition 'after previous' 'With previous' Animation pane	Hyperlink Action Home page/menu page Insert shape Shape fill/shape outline timings
--	---	---

Big ideas and key concepts

Creating a non-linear presentation with a working menu page to use to navigate to desired slide in the presentation
 Creating navigation 'button' which allow user to make choices
 Create a quiz that includes sound effects
 Importance of testing and debugging errors
 Make design choices to suit a particular purpose e.g. what happens if user/player gets question right? Or wrong?

Assessment opportunity

Work scrutiny at the end of each lesson and at the end of the topic -
 Have the children produced a workable presentation that fit the given criteria?
 Peer assessment of each other's presentations

What teachers need to know

How to create a non-linear presentation in PowerPoint using hyperlinks.

Unit:	What is a Computer?	Year:	5	Term:	Autumn 2
-------	---------------------	-------	---	-------	----------

Links to prior learning

All previous skills and knowledge of working with PowerPoint, Word and Publisher - inserting text boxes and images into their documents.

New learning

In this unit the children deepen their understanding of computer hardware, specifically identifying the basic components of a computer and input and output devices and understanding their function. The children are then given a choice of what software to use to best present their learning.

Preparation for future learning

With a basic knowledge of the Computer components such as the CPU, motherboard, RAM and hard drive the children will have a better understanding of the importance of how we need to treat a computer. Such as the importance of logging off correctly. Understanding what the internet is and how it works will benefit the children when covering online safety units and studying Computing in KS3.

Key Vocabulary

Input & output Device Component Central Processing Unit Power supply Motherboard Hard drive RAM Random Access Memory USB port	Process Storage Headphone Mouse Keyboard monitor Memory stick microphone	Camera Floppy disk Network cable Barcode reader/scanner Scanner Printer Projector speakers	Internet Binary Bits IP address DNS Domain name system
--	---	---	--

Big ideas and key concepts

To have a basic understanding of the function of the 6 main components of a computer.
To be able to label and sort peripheral devices into input devices and output devices.
Have a basic understanding of what the internet is and how it works, including binary

Assessment opportunity

Questioning during the unplugged session in the classroom will indicate the children's initial understanding. The children are to then demonstrate their understanding of the concepts covered in this topic creating a poster/information leaflet or quiz. The quality of their finished documents will indicate the children's level of understanding.

What teachers need to know

Identify and know the function of the basic components of a PC as detailed in the vocabulary.

Unit:	Programming to Create Digital Art
--------------	--

Year:	5
--------------	----------

Term:	Spring 1
--------------	-----------------

Links to prior learning

Repeat loops, Sequencing and how to find and fix errors in code covered in the previous year.
Basics of the Scratch Software

New learning

The focus of this unit is to consolidate and build on the use of 'repeat loops' in programming covered in year 4. The children explore how Scratch can be used to create art. Various geometric patterns are generated using the pen tools, loops and nested loops. This unit supports the children's learning in Mathematics specifically angles and degrees in a circle.

Preparation for future learning

Understanding the importance of sequencing in algorithms is the basis of all programming.

Understanding of how repeat loops work, specifically several instructions can be placed in a loop to be repeated. Also repeat loops can be combined with a condition to specify how many times to repeat instructions – repeat until

Key vocabulary			
Algorithm	Sprite	Pen up	
Debug	Stage	Pen down	
Evaluate	Wait	Repeat until ...	
Program	selection	Mouse pointer	
repeat	'If touching....then'	degrees	

Big ideas and key concepts

Names of 2D shapes

Degrees in a circle

'Repeat until...'

Nested repeat loops

Tracking the accuracy of your program to be able to identify errors

Assessment opportunity

The responses the children give to the unplugged sessions held in the classroom.

Speed and effectiveness of initial Scratch project

Results in the online assessment tool – Code.org

What teachers need to know

How to use Scratch software –repeat blocks
How to make an account for the children on the Code.org website.
An understanding of the vocabulary listed.

Unit: What is a Variable?

Year: 5

Term: Spring 2

Links to prior learning

Use of pen tools, repeat loops,
Sequencing and how to find and fix errors in code covered in the previous year.
Basics of the Scratch Software

New learning

Continuing from the previous term, Year 5 move on to what is and how to use variable in their programs.
A variable is storage space within a program that can store a value/letter/word and this value can be changed as the program runs. A variable can be used in a huge number of ways. Initially Year 5 will be making a Score, time and Speed variable.

Preparation for future learning

Understanding how variables work will equip the children with knowledge that is needed to create more sophisticated projects in year 6

Key vocabulary

Algorithm Debug Evaluate Program repeat	Sprite/ costume Stage Wait Conditional selection	If .. then... else ... Repeat until ... Mouse pointer	Variable Set variable Change variable
---	---	---	---

Big ideas and key concepts

What is a variable
 What can a variable be used for
 How to label, set and change a variable
 Prediction and evaluation of program
 Tracking the accuracy of your program to be able to identify errors

Assessment opportunity

The responses the children give to the unplugged sessions held in the classroom.
 Speed and effectiveness of Scratch projects
 Results in the online assessment tool – Code.org

What teachers need to know

How to use Scratch software – particularly how to create and use a broadcast.
 How to make an account for the children on the Code.org website.
 An understanding of the vocabulary listed.

Unit:	What is a spreadsheet and what is it used for?	Year:	5	Term:	Summer 1
--------------	---	--------------	----------	--------------	-----------------

Links to prior learning

This links to the children's experience of using Microsoft Excel in the Year 4 data unit to create graphs and other charts.

New learning

This unit introduces the purpose of using a spreadsheet to organise and interpret data easily and how they can be used to explore different options and scenarios. This lays the foundations that is developed further in the year 6 Spreadsheet unit. The children also have the opportunity to explore a database and to answer enquiries.

Preparation for future learning

Understanding how to use a spreadsheet to manipulate data will be useful in many curriculum areas in KS3 & KS4

Key vocabulary			
Excel Column Row cell	Formula Quantity Budget debt		

Big ideas and key concepts

What is a spreadsheet and what can it be used for?

Concept of budgeting and using the spreadsheet to make financial decisions to avoid overspending.

Assessment opportunity

Looking at the degree of sophistication of spreadsheets produced by the children – do their formulas work?

What teachers need to know

Very basic features of Microsoft Excel

Unit: **Recording & Editing Sound**

Year:

5

Term:

Summer 2

Links to prior learning

This unit revisits the learning on editing Sound recordings using Audacity in year 4

New learning

In this unit the children revisit what they learned in year 4 about recording and editing sound. They then explore this further by finding and saving various sound effects from the internet and inserting these into their voice recordings, along with other special effects such as adding an echo to achieve a desired atmosphere in their recordings.

Preparation for future learning

This unit paves the way for using Audacity when creating multimedia presentations in the future.

Key vocabulary

Audacity Play Record pause	Clip/crop Highlight Amplify pitch	Mute Headphone Speaker Clipping Save project as	Tempo Echo Delay
-------------------------------------	--	---	------------------------

Big ideas and key concepts

How to record sound, voice clips using Audacity
 Sound files are similar to image files, they can be cropped flipped stretched etc
 We can edit sound files - e.g. change the pitch, tempo, amplification etc,
 How the quality of the sound can be changed to create a desired atmosphere such as an echo.

Assessment opportunity

Peer and self-assessment of the abilities to create a sophisticated recording.

What teachers need to know

How to use Audacity to format digital sound recordings
 How to find sounds on the find sounds website

Unit:	Game design & event handling using PowerPoint	Year:	6	Term:	Autumn 1
	Creating a non-linear presentation with hyperlinks and animated sequences				

Links to prior learning

All previous skills and knowledge of working with PowerPoint

New learning

This unit consolidates all previous learning in presenting information for a purpose, with the user at the core of all design choices. The children revise their knowledge of PowerPoint, combining animations, sound and hyperlinks to create a playable game. The new learning is how different shapes and images and text can be used to 'trigger' different events when clicked or if the mouse moves over them. This unit also complements the Programming units, as it provokes the children to constantly evaluate their projects in terms of whether they work as a game. Many Computational concepts and skills are covered such as sequencing, selection, evaluation, decomposition and debugging.

Preparation for future learning

Basic knowledge of how to combine text and images to create a PowerPoint presentation, particularly having to hyperlink shapes and text to different slides in the same document

Thinking about the needs of the audience

Evaluating and editing skills

Key Vocabulary	
Slide	Hyperlink
Animate	Action
Slide show	Home page/menu page
Transition	Insert shape
'after previous'	Shape fill/shape outline
'With previous'	Trigger
Animation pane	Mouseover
Copy /paste	duration/timings

Big ideas and key concepts

Creating a non-linear presentation with a working menu page to use to navigate to desired slide in the presentation
Creating navigation 'button' which allows user to make choices
Create a quiz that includes sound effects
Make design choices to suit a particular purpose

Assessment opportunity

Work scrutiny at the end of each lesson and at the end of the topic -
Have the children produced a workable presentation that fit the given criteria?
Peer assessment of each other's presentations

What teachers need to know

Unit: Using a spreadsheet to calculate profit and loss.

Year:

6

Term:

Autumn 2

Links to prior learning

This unit builds on the children's experience of using Microsoft Excel in the Year 5 data unit which introduces the concept of spreadsheets and how they can be used.

New learning

This unit is taught in the autumn term to compliment the Enterprise topic the children do in class in preparation for the Christmas fair. The children learn how to use several basic Excel formulas to calculate profit and loss in their enterprise projects and make decisions such as how much to charge for the items that they are selling.

Preparation for future learning

Understanding how to use a spreadsheet to manipulate data will be useful in many curriculum areas in KS3 & KS4

Key vocabulary

Excel
Column
Row
cell

Formula
Quantity
Budget
debt

Profit
loss

Big ideas and key concepts

What is a spreadsheet and what can it be used for?

Concept of budgeting and using the spreadsheet to make financial decision to avoid overspending. Calculating profit and loss on the children's Christmas enterprise projects.

Assessment opportunity

Looking at the degree of sophistication of spreadsheets produced by the children – do their formulas work?

What teachers need to know

Very basic features of Microsoft Excel

Unit: **What is Variable?**

Year: 6

Term:

Spring 1

Links to prior learning

Use of pen tools, repeat loops, broadcasts

Coordinates in 4 quadrants

Sequencing and how to find and fix errors in code covered in the previous year.

Basics of the Scratch Software

New learning

In this unit the children look at how coordinates are used to govern the movement of sprites.

Using Scratch, the children are introduced to the concept of 'variables' in programming and how they can be used in a range of different programming projects to add a score or change speed or any variable that changes as a program runs.

Preparation for future learning

Understanding how coordinates allow a precise location to be specified or changed.

Variables play a key role in programming, whatever the computer language used.

Key vocabulary			
Algorithm Debug Evaluate Program repeat	Sprite Stage Wait selection	Variable Make a variable Set variable Change variable	x and y axis Coordinates Change X by Change Y by

Big ideas and key concepts

Positive & negative numbers
X and Y coordinates in all 4 quadrants
What a variable is and how it is useful in programming
Prediction and evaluation of program
Tracking the accuracy of your program to be able to identify errors

Assessment opportunity

Peer assessment of each other's Scratch games
Speed and effectiveness of Scratch projects – do the games/ score work?
Results in the online assessment tool – Code.org

What teachers need to know

How to use Scratch software – variables
How to make an account for the children on the Code.org website.
An understanding of the vocabulary listed.

Unit: **Making a Quiz**

Year:

6

Term:

Spring 2

Links to prior learning

Use of pen tools, repeat loops, broadcasts
Coordinates in 4 quadrants and variables covered last half term
Sequencing and how to find and fix errors in code covered in the previous year.
Basics of the Scratch Software

New learning

In this last term of programming with Scratch the children look at using 'if ...then' and 'if ...else' blocks to create quizzes in which different sets of events can be triggered by different responses of the user/player. This will also require pupils to draw on their knowledge of how to use 'variables' from the previous term and 'broadcasts' from the previous year.
Also how to use the 'text to speech' blocks

Preparation for future learning

Variables play a key role in programming, whatever the computer language used.
Selection – the need to create code for 2 outcomes: user answers correctly or incorrectly
And creating code for 3 different outcomes: user estimates too high, too low or exactly right

Key vocabulary			
Algorithm	Sprite	Variable	Ask blocks
Debug	Stage	Make a variable	'if answer > then'
Evaluate	Wait	Set variable	'if answer < then'
Program	Selection	Change variable	'if answer = then'
repeat	broadcasts	'text to speak' blocks	

Big ideas and key concepts

How to use the 'Ask' blocks
How to use the 'Text to Speech' blocks
What a variable is and how it is useful in programming
Prediction and evaluation of program
Tracking the accuracy of your program to be able to identify errors

Assessment opportunity

Peer assessment of each other's games and quizzes
Speed and effectiveness of Scratch projects – do their quizzes work?
Results in the online assessment tool – Code.org

What teachers need to know

How to use Scratch software – variables & the 'ask – answer' blocks
How to make an account for the children on the Code.org website.
An understanding of the vocabulary listed.

Unit: What is the internet?

Year:

6

Term:

Summer 1

Links to prior learning

This unit links to all experience children have of using the internet both home and at school, and how to use search engines efficiently

New learning

This unit enables children to understand what networks are, specifically the internet. The unit covers a basic understanding of the following: web browsers, search engines, the function of network switches and routers, the difference between the World Wide Web and the internet. How searches on the internet are ranked and how this ranking can be influenced.

Preparation for future learning

This unit aims to equip the year 6 children with the knowledge, confidence and resilience to transition to secondary school with a positive and healthy attitude about themselves and their relationships and to use the internet constructively.

Key vocabulary

Network
Network switch
server
router
Internet
World Wide Web

Web browser
Search engine
Packets
traceroute

Chrome
Google
Yahoo
Safari

Big ideas and key concepts

What is the internet?
What is the World Wide Web? Is it different to the internet?
What is a router and what does it do?
What does a web Browser do?
What is a search engine?

Assessment opportunity

Short recapping quizzes each week
Formal assessment to test understanding at the end of the unit.

WHAT TEACHERS NEED TO KNOW

Basic understanding of networks & internet

Unit:	Presenting information (Text and Images) for a purpose	Year:	6	Term:	Summer 2
-------	--	-------	---	-------	----------

Links to prior learning

This unit links to all previous lessons where the children have used Word. It also links with the PSHE themes of creating and protecting your online reputation - *digital footprint*.

New learning

In this final word processing task the children are asked to research and design their own CV. This CV project requires the children to look at using higher order graphic design skills and word processing skills to produce a document that is eye-catching and professional in its finish. The key technical skills are how to insert and format a table in a Word document and design features that are fit for the task of CV writing.

Preparation for future learning

Word processing skills including how to use a table to format text
This unit aims to motivate year 6 to transition to secondary school with a positive and enthusiastic attitude about themselves and their future.

Key vocabulary

Backspace	copy/paste	Bold
Enter key	Right click	Alignment, right, left, centre
Shift key	menu	Table
Arrow keys	Design	Row
Save /open	Corporate	Column
File/file name	brand	Merge cells

Big ideas and key concepts

Creating a document for a specific purpose; how to create a professional, yet eye-catching CV.
Inserting and formatting a table
Formatting text,
Using tools such as spell check, thesaurus
Editing, evaluating and modifying a document

Assessment opportunity

Quality and sophistication of the finished CV

What teachers need to know

What is a CV.
How to use Word -specifically how to add a table

ONLINE SAFETY UNIT PLANS

Unit:	Protect ourselves - Know who to tell if concerned about online content or contact.	Year:	3	Term:	Autumn 1
-------	---	-------	---	-------	----------

Links to prior learning

This unit links to any Online Safety messages previously taught in KS1

New learning

In the first term at St Peter's, the aim of this first unit is to ensure the children know the essentials of what to do if they come across content that they are not happy about or they think is inappropriate when working online, either at home or at school. They also need to know what to do if they feel any contact made on line makes them feel uncomfortable or seems inappropriate. The children need to know how to screen-shot any page or image on a website when working on their iPads to provide evidence of the inappropriate content. When working on a PC, children need to know the importance of switching off their monitor and telling a teacher immediately to limit the number of children seeing the offending content but still allowing the teacher to turn the monitor back on and viewing the content and make a screen-shot if necessary.

Preparation for future learning

Equips children for protecting themselves when working on line in the future.

Key vocabulary

Internet
World Wide Web
Online
Screen shot
Print screen
Monitor
Contact
Filter
policy

Big ideas and key concepts

An unfiltered internet, what children will experience in their homes, is open to anyone in the world.
Not all people in the world use the internet positively.

Some information/images on the internet are not suitable for children.

If children come across inappropriate images or use of the internet they need to follow the agreed procedure and tell an adult, so the offending content can be removed.

Assessment opportunity

Work scrutiny of the outcome of the lesson

Children's questionnaire delivered by the Online Safety Subject Leader

What teachers need to know

The school's agreed protocol for what to do if inappropriate content gets through the schools filter when working in the ICT suite or when working on the iPads during a lesson.

Unit: Relationships: online friendships

Year:

3

Term:

Spring

Links to prior learning

Online Safety messages taught in KS1

New learning

Friendships online -

Pupils explore the similarities and differences between in-person and on-line communications and friendships. What are the similarities and differences between friends you know and have met in person and those friends you only interact with online that you have never met in person. The children are taught to understand which information is safe to share online and what is not.

Preparation for future learning

Equips children for protecting themselves when working on line in the future and being aware that friendships made online only need to be treated with caution.

Key vocabulary

Internet
World Wide Web
Online
Screen shot
Print screen
Monitor
Contact
filter

Share
Over-share
Privacy
Public
Private
In-person
Trust
reliable

Big ideas and key concepts

Friendships made online only need to be treated with caution.
It is easy to pretend to be a different person online.
You can trust a friend who you have met in-person as you can see who they really are.
Not everyone on the internet has good intentions and you need to be aware and follow internet rules to stay safe

Assessment opportunity

Work scrutiny of the outcome of the lesson

Children's questionnaire delivered by the Online Safety Subject Leader

What teachers need to know

- What platforms/games etc their children play on at home.
- What information is ok to share online and what is not.

Unit:	Passwords: why we need them and how to make a good one.	Year:	3	Term:	Summer
-------	---	-------	---	-------	--------

Links to prior learning

'It is important not to share all information about yourself publicly and you need to keep some information secure' which was covered in the previous Online Safety unit.

New learning

Passwords

Pupils explore reasons why people use passwords, learn the benefits of using passwords, and discover strategies for creating and keeping strong secure passwords that are easy to recall. What makes a password strong? weak? For a password to be strong it needs to be not too obvious and easy for others to guess.

Preparation for future learning

A system for creating strong but memorable passwords has become a life skill.

Key vocabulary

Internet	Share
World Wide Web	Over-share
Online	Privacy
Password	Public
Username	Private
Memorable	Trust
Characters	Reliable
Lower case/upper case	strong/weak password

Big ideas and key concepts

- Why do we need passwords when working online.
- What makes a password strong?
- How can we avoid setting a weak password but still be able to remember it.

Assessment opportunity

The children set a strong password and are then asked to recall the password the next day?, a week later?, a month later?
Children's questionnaire delivered by the Online Safety Subject Leader

What teachers need to know

- What is the most up to date advice on what makes strong and weak passwords.

Unit:	Being Healthy Online	Year:	4	Term:	Autumn
-------	----------------------	-------	---	-------	--------

Links to prior learning

Other PSHE lessons that focus on mental health and relationships with peers and family.

New learning

Being Healthy Online
 Screen time - what is a healthy balance between time spent online/offline?
 How can we ensure that too much screen does not adversely affect mental health, relationships and physical health.
 Too much screen time will result in other aspects of health suffering, eg sleep deprivation, screen addiction, weight gain, disproportionate peer pressure anxiety.
 Why are children spending so much time on their devices/screens? What causes an imbalance of online activity to the detriment of time spent on other forms of activities. Research has shown that some children can get very anxious if they feel they might miss some important message, post or text if they are away from their mobile devices.

Preparation for future learning

It is important that children are aware of the issues around appropriate screen time so that they can become capable of monitoring and regulating their own time and online activities in the future.

Key vocabulary

Screen time Age restrictions Online Appropriate/inappropriate balance	Physical health Mental health
--	----------------------------------

Big ideas and key concepts

- We need to be aware of how much time we spend looking at a screen
- Screen time alone, without other forms of activity, is not healthy.
- Too much screen time has a detrimental effect on relationships, sleep patterns and physical health.
- Physical activity should be an important part of the day and not replaced by playing virtual sport on screen..

Assessment opportunity

Children's questionnaire delivered by the Online Safety Subject Leader

What teachers need to know

What games, Apps and social media platforms are popular at the time of teaching to aid discussions with children.

Unit: Cyberbullying

Year:

4

Term:

Spring

Links to prior learning

This unit links to previous work on bullying, especially in anti-bullying week.

New learning

Cyberbullying

Children need to be reminded that it is very important to treat people just as kind and politely online as you would if you were speaking to them face to face.

Being an upstander: Being aware that someone else you know is the victim of cyberbullying and not doing anything about it is not ok. We all have a

responsibility to speak up for the person who is being bullied by telling an adult.
Social isolation from online groups or communities is a form of bullying and is not acceptable.

Preparation for future learning

It is an important part of the ethos of the school to engender a sense of responsibility in the children to all work together to stamp out any form of bullying.

Key vocabulary

Bystander	Etiquette
Upstander	Mutual respect
Victim	Deliberate
Responsibility	
Isolation	
Alienate	
Bully	

Big ideas and key concepts

- Treat people online as you would in person - politely and with respect.
- Not being able to see the victim does not give you a licence to be more cruel or hurtful than you would be face to face.
- If you are aware of any harsh or bullying treatment of another you have a duty to report it to someone in authority.
- Deliberately leaving someone out of an online group, with the intention to be hurtful, is a form of bullying.

Assessment opportunity

Children's questionnaire delivered by the Online Safety Subject Leader

What teachers need to know

What issues around bullying have previously been taught.

Unit:	Living in the Wider World: age restrictions	Year:	4	Term:	Summer
-------	---	-------	---	-------	--------

Links to prior learning

This links to the Y4 unit in Autumn which raises the issue of age appropriate activity.

New learning

Age appropriate activity: why do some games or Apps have age restrictions? What are the age restrictions for the most popular apps and games?

Preparation for future learning

Age restrictions are there for a reason and in order to protect children from unsuitable content they need to be made aware of the restrictions.

Key vocabulary

Age restrictions Unsuitable content appropriate/inappropriate filtered/unfiltered	
--	--

Big ideas and key concepts

Some games and Apps have age restrictions on them for very good reasons.

Assessment opportunity

Children's questionnaire/survey delivered by the Online Safety Subject Leader

What teachers need to know

What are the popular games and Apps most of the children in the class are playing currently and what are the age restrictions for these games.

Unit:

Year:

5

Term:

Autumn

Links to prior learning

This unit reinforces the messages covered in the Y3 Autumn: Protect ourselves - Know who to tell if concerned about online content or contact.

New learning

Protecting Ourselves

Demonstrate use of online services and technologies and know a range of ways to report concerns.

What is the correct procedure for responding to a concern you may have about something you see on a well-used social media platform.

Look at examples of when people have made complaints against Facebook or Twitter. When does free speech need to be limited to protect other rights or feelings.

Preparation for future learning

To be a good digital citizen the children need to know what the correct procedure is for reporting concerns they have about online content and that they should feel empowered to make complaints if they feel it is necessary.

Key vocabulary

Report
Right to Free speech
Freedom of expression
censorship
Complaints procedure
liberty

Big ideas and key concepts

How should concerns about a website or social media platform be reported.
When should censorship come before the right to free speech?

Assessment opportunity

Children's questionnaire/survey delivered by the Online Safety Subject Leader

What teachers need to know

What are the correct procedures for these types of complaints.
Some good examples of when these issues have hit the media e.g. should websites that encourage teenagers to commit suicide or anorexia 'tips' be allowed to exist.

Unit:	Online Reputation & our Digital Footprint	Year:	5	Term:	Spring
-------	---	-------	---	-------	--------

Links to prior learning
This unit links to the prior learning about cyberbullying and how you should treat others online.

New learning
Online Reputation and our Digital Footprint How are online reputations formed? What is a 'digital footprint? What does what you post/share/like say about you? Why does your digital footprint matter? Look at examples of people in the media or celebrities that have suffered a negative reaction to a historic post or picture on social media.

Preparation for future learning
It is important that young people understand that what they post about themselves or others on social media may have consequences in the future and they need to take responsibility and think through their actions.

Key vocabulary	
Reputation Digital footprint Responsibility media	

Big ideas and key concepts

What is a digital footprint?
Why does your digital footprint matter?
How can you ensure a positive digital footprint?

Assessment opportunity

Children's questionnaire/survey delivered by the Online Safety Subject Leader

What teachers need to know

What is a digital footprint? - A **digital footprint** is a funny term used to describe the traces of yourself that you leave online. It's called a **footprint** because, with every website you visit, you leave a trail or **footprint** showing that you've been there - much like the **footprints** you leave while playing outside in the snow.

Unit:	Commercial Risks	Year:	5	Term:	Summer
-------	------------------	-------	---	-------	--------

Links to prior learning

This unit links to the previous unit in the Autumn term on the age restrictions on some games and apps.

New learning

Commercial Risks

Who pays for the internet?

How is advertising used to fund websites.

In- app purchases - how games are designed to make money from in-app purchases and encourage players to spend more money. Children need to

be made aware of the financial temptations and risks that these games bring, specifically Fifa and Fortnite - How do these games encourage us to spend our money?
What is Spam? How can you recognise spam?
Websites saving credit card numbers

Preparation for future learning

The learning in this unit will equip the children to make more informed choices when using the internet in the future.

Key vocabulary

Advertisement
In-app purchases
Spam
Reliable
Credit card
Financial

Risk
Data
Virtual currency
In-games 'coins'

Big ideas and key concepts

The website use advertising to make money

Many game websites and apps have their own virtual currency that players can buy with real money to gain advantages, extra levels or additions to an avatar. These games companies want players to spend as much money as possible.

Spam is any kind of unwanted, unsolicited digital communication that gets sent out in bulk

Assessment opportunity

Children's responses to questions and activities during the lesson and questionnaire/survey delivered by the Online Safety Subject Leader

What teachers need to know

It is worth teachers becoming familiar with the most popular games the children are playing and how the children are enticed to spend money.

Unit:	The ideal versus the real - what are the effects of photoshopping images	Year:	6	Term:	Autumn
-------	--	-------	---	-------	--------

Links to prior learning

This unit links to previous PHSE units on peer-pressure and self esteem.

New learning

The ideal versus the real

Image editing - photoshopping - what are the positive and negative effects of being able to edit out all imperfections on every photo taken on body image and the mental health of young people?

Gender issues and stereotyping

Preparation for future learning

Mobile technology, with everyone having a camera with them at all times, has led to the 'selfie' generation in which images can be shared, scrutinised and judged instantly. Pupils need to be aware how this has distorted young people's perception of the ideal body or face.

Key vocabulary

Image Photoshop Selfie Self-esteem Body image	Gender Stereotype Perception Peer pressure
---	--

Big ideas and key concepts

What are the positive and negative effects of being able to edit out all imperfections on every photo taken and shared on body image, self-esteem and the mental health of young people?
 What is 'normal' when it comes to body size. Who determines what is 'normal'?
 What is the ideal body shape?
 Are there more pressures on women than men to achieve 'the perfect body'?

Assessment opportunity

Children's questionnaire/survey delivered by the Online Safety Subject Leader

What teachers need to know

Teachers may want to google a range of images of celebrities and over edited images to generate discussion.

Unit:	Social Media - the positives and the pitfalls	Year:	6	Term:	Spring
-------	--	-------	---	-------	--------

Links to prior learning

The learning in this units builds on the themes addressed in the unit on digital footprint and protecting your online reputation covered in year 5.

New learning

Social Media

What is social media? What are the benefits of social media? Connecting people, bring like minded people together, campaigns and protests can be generated very quickly. news spread quickly.

What is appropriate? Age restriction? Why do social media sites have age restrictions?

What are the risks? Over sharing, obsessive checking for messages, unhealthy amount of time spent on social media, fear of missing out or being isolated.

Image rights - who does the image belong to? Always ask permission of the people in the image before sharing.

When is it ok to share a picture.

What could be the consequences of sharing inappropriate images on social media

Preparation for future learning

Vital to make children aware of the issues surrounding the use of social media.

This unit leads on the unit next term which focuses on 'Fake News'

Key vocabulary

Social media	Age restrictions
Over sharing	Peer pressure
Image rights	Control
Permission	Privacy
consent	public/private

Big ideas and key concepts

What is social media?

What are the positives and negatives?

Why do social media sites have age restrictions? What are they?

What are image rights?? - who does the image belong to? Always ask permission of the people in the image before sharing.
What could be the consequences of sharing inappropriate images on social media?

Assessment opportunity

Questioning in class
Children's questionnaire/survey delivered by the Online Safety Subject Leader

What teachers need to know

The basic positives and negatives of social media
Age restrictions
Differences between the popular social media sites that young people are using currently

Unit:	What is Fake News?	Year:	6	Term:	Summer
-------	---------------------------	-------	---	-------	--------

Links to prior learning

This unit links to the previous learning on how websites make their money and how children need to be more discerning when considering the information presented on some websites.

New learning

What is Fake News? How can we know which news is real or fake?
What is the source of the news article? On what platforms is the story being published? Who else is reporting the story?
Motivation and bias in the media.
How can you validate information?
How to determine which websites are trustworthy.

Preparation for future learning

For future learning and researching on the internet, it is vital that children learn that not all that you read on the internet may be true. Children need strategies to determine the reliability of what they read on the internet.

Key vocabulary

Fake news	Public service broadcasting - BBC
Bias	Media
Validate information	Ofcom
Credible	verify
Source	
reliable	

Big ideas and key concepts

Not everything published on the internet is true.
If it is not true or can't be verified it is fake news
To know whether you can trust what you read you need to validate the information.
To validate the information you need to determine its source and compare it to other news outlets to see who else is publishing the story.
Some websites are more reliable than others, such as BBC due to being regulated by Ofcom.

Assessment opportunity

Children's questionnaire/survey delivered by the Online Safety Subject Leader

What teachers need to know

How to validate information and determine real and fake news.

