

**Year 3/ 4 Computing Curriculum**  
**Medium Term Plan**

Year 3/ 4 Autumn				
Topic		Lesson Focus	Key Knowledge	Vocabulary
<b>ESafety</b>	1	Self Image and Identity	To know what identity means. To know that people can represent themselves in different ways online. To know that people can change their identity depending on what they are doing online (gaming, avatar, social media).	Web browser, Internet, advantages, disadvantages, website, personal information, private, navigate, concerns, risk, sharing, trust, responsible, respect, impersonation, social media, Apps, dangers, digital footprint.
	2	Online relationships	To know ways in which people with similar interests can get together online such as gaming. To know what is meant by trusting someone online and the importance of being careful about who to trust. To understand how our feelings can be hurt online. To know the importance of giving and gaining permissions before sharing things online and that the things we share leave a 'digital footprint'.	
<b>Programming in Scratch</b>	1	Understand algorithms and debugging	To know what an algorithm is. To know what debugging is.	Algorithms, predict, debugging, program, repeat, input, output, sequencing, commands, directions, repeat, loops, trail, conditionals, true or false statements.
	2	Predict when algorithms might go wrong	To know that sometimes algorithms can go wrong and that we can fix them. We can predict where an algorithm will go wrong by reading the code.	
	3	Create loops	To know that A loop in a computer program is an instruction that repeats until a specified condition is reached.	
	4	Create a sequence	To know that sequencing means that the computer will run your code in order, one line at a time from the top to the bottom of your program.	
	5	Understand conditional statements	To know that it is important to sequence a code when conditionals are introduced. To know that a conditional statement tells a program to execute different actions depending on whether a condition is true or false.	

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<b>Spring</b>				
<b>ESafety</b>	1	Online bullying	To know how to behave towards others online and the importance of this. To know how bullying behaviour can appear online and how to get support.	
	2	Managing online information	To know how to use search engines to gather information. To know how the internet can be used to sell and buy things. To know the difference between belief, opinion and fact and how and where these things might be shared. To know how to get help from a trusted adult if something makes us worried or frightened.	
	3	Health, well-being and lifestyle	To know why spending too much time on technology can sometimes have a negative impact on our well being and health. To know why some content/activities have age restrictions and why we should stick to them.	
<b>Comic Creation</b>	1	Explore comics	To know that comics are a medium used to express narratives or other ideas through images, usually combined with text. It typically takes the form of a sequence of panels of images.  To know the advantages of creating comics digitally compared to how they were previously made. (e.g speed of production).	Scaling, moving, panel, background, tab, narration, objects, embed, characters, digital, bubbles, stickers, resize,
	2	Features of a comic	To know the different aspects of comic creation: scenes, backgrounds, characters, narration/speech bubbles, stickers.	
	3	Edit comic book	To know how to add, resize and organise colour or picture backgrounds.	
	4	Create comic	To know how to add, resize, organise characters/objects to different panels.	

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	5	Add narration	To know how to add narration using text and direct speech using speech bubbles.	
<b>Summer</b>				
<b>ESafety</b>	1	Privacy and security	To know strategies for creating and keeping passwords private. To know that we should only share information with people we trust. To know that connected devices may share our information with others.	
	2	Copyright and ownership	To know that copying someone else's work from the internet isn't fair and that it can be illegal.	
<b>Document Editing</b>	1	Use search engines	To know that the internet can be used to research things we want to find out. To know that we can use search engines such as Google, or child friendly search engines such as Swiggle, Kiddle, KidRex or DK Find Out to find information.	Google Docs, Copy and paste text, dragging, highlighting, document, fonts, styles, formatting, resizing, moving, research, search engines, Google, Swiggle, Kiddle, KidRex, DK Find Out
	2	Explore google docs	To know that documents can be created and edited using software on Google Docs and that they can combine a range of IT skills to create their own document which accomplishes a specific goal.	
	3	Copy and paste, Find and replace words, Format text, Edit images	To know how to copy and Paste text and images. To know how to find and replace words. To know how to format text for a purpose. To know how to edit images inside documents.	
<b>Music Creator</b>	1	Explore creating music on a computer	To know that creating music on a computer has its advantages such as It easier to change sounds, use more instruments without owning them etc.	Scales, chords, pitch, arpeggios, melody, tempo, rhythm, mix, samples, variables, multi-tracking, layering, sample, ascending scale, descending scale, edit, rhythm, sequence, block
	2	Explore scales	Children need to know the vocabulary of Scales, chords, pitch, arpeggios, melody, tempo and rhythm **  To know that a scale is an organised sequence of notes. Ascending scale- going up, descending scale- going down.	

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			To know how to add chords evenly across the scale aswell as arpeggios and melodies.	chord, mixing, recording, looping
	3	Understand melodies	To know that a melody is the main tune in a piece of music.	
	4	Understand and explore arpeggio	To know that an arpeggio simply describes when the notes of a chord are played one after the other rather than at the same time. This is as opposed to a block chord where the notes are all played at the same time	

\*ongoing skill throughout year