

**Y2 Computing Curriculum**  
**Medium Term Plan**

<b>Year 2 Autumn</b>				
<b>Topic</b>		<b>Lesson Focus</b>	<b>Key Knowledge</b>	<b>Vocabulary</b>
<b>ESafety</b>	1	Self image and identity	To know that people may look and act differently online and offline. To know what might make some people sad, frightened or worried online. To know how to get help.	
	2	Online relationships	To know how someone might use technology to communicate with others they don't also know offline and explain why this might be risky. (e.g. email, online gaming, a pen-pal in another school / country) To know that we should ask before sharing information about ourselves. To know that we have the right to say no and to feel safe when online. To know who can help when we feel scared, worried or concerned when online.	
<b>Recognising uses of IT</b>	1	Changes in IT	Younger pupils should understand which day to day objects have computers within them. Look at several objects; e.g a calculator, cup, watch, lamp etc, and discuss which ones have microchips inside and why.	Digital, non-digital, computer, microchip, laptop, keyboard, device, mouse, headphones, monitor, modem, router, drone, webcam, tablet, smartphone
	2	Features of a computer	To know that computers are made up of many parts such as a monitor (output device which shows information on the screen), keyboard (an input device where we can type), main computer, and mouse.	
	3	Features of a computer	To know the parts that make up a computer are called hardware. Programs which tell a computer what to do are called software. To know that inside the computer are two main parts, the processor and the memory. The processor follows the instructions in programs and sends out messages telling the other parts of the computer what to do. The memory is where the computer stores programs and information.	
<b>Introduction to animation</b>	1	Famous animators	To know some famous animators: Pixar, William Hanna and Matt Groening.	Animate, stop motion, Image, clone, frame, group, loop, frame rate, export, cartoon
	2	Create a flip book	To know that animation is a series of images played in order as a film to create motion.	
	3	Create a simple animation	To know that they can create animations by using stop motion and the smaller the movements, the smother the animation will be. To know that most animations are made on the computer. On computers, most people/companies use a program called Adobe Flash to make their animations.	

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	4	Create a stop animation	To know that they can create animations by using stop motion and the smaller the movements, the smother the animation will be.  To know that most animations are made on the computer. On computers, most people/companies use a program called Adobe Flash to make their animations.	
<b>Spring</b>				
<b>eSafety</b>	1	Online reputation	To know that information put online can last a long time. To know that our online information can be seen by others. To know who to ask for help if information has been put online without consent or if it is incorrect.	
	2	Online bullying	To know what bullying is, how people may bully others and how bullying can make someone feel. To know that anyone who experiences bullying is not to blame. To know how some who are being bullied can get help.	
	3	Managing information online	To know how keywords can help us search for content online. To know how to navigate a simple webpage to find information. To know that some content online may not be real or true.	
<b>Data Handling</b>	1	Understand data	To know that data is a collection of information. Gathered by observation, questioning or measurement.	Data, questions, observations, pictogram, bar chart, line graph, title, axis label, key
	2	Collect data	To know that data is a collection of information. Gathered by observation, questioning or measurement. To know that a computer can be a very useful tool for making pictograms, bar charts, line graphs etc to show information that we have collected in a picture format. To know we can type in data and present it in different ways. To know that a pictogram is a chart that uses pictures to show the results after collecting data	column- vertical (up/down) Row- horizontal (left/right/across)
	3	Create a chart	To know that: A bar chart is when a set of data is shown in columns as 'bars'. A line graph is used to display information which changes over time. It is plotted on a graph as a series of points joined with straight lines. To know that graphs need to be labelled with a title so that people know what the data represents.	
<b>Summer</b>				

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<b>ESafety</b>	1	Health, well-being and lifestyle	To explain simple guidance for using technology in different environments and settings e.g. accessing online technologies in public places and the home environment.	
	2	Privacy and security	To know that passwords are used to protect information, accounts and devices. To know what is meant by 'private' and 'keeping things private'. To know some rules for keeping personal information private (e.g. creating and protecting passwords).	
<b>Programming</b>	1	Recap algorithms	To know what an algorithm is. To know that if an algorithm doesn't work you can fix it and this is called debugging.	Algorithms, debugging, program, repeat, input, output, sequencing, commands, directions, repeat, loop, predict.
	2	Using algorithms	To know that they can predict the outcome of an algorithm before 'running' it if they read the code carefully. To know that if an algorithm uses multiple steps which are the same, they can simplify the algorithm by using a loop. To know that A loop in a computer program is an instruction that repeats until a specified condition is reached.	
	3	Debugging	To know that if an algorithm uses multiple steps which are the same, they can simplify the algorithm by using a loop. To know that A loop in a computer program is an instruction that repeats until a specified condition is reached.	
<b>eBook creator</b>	1	Explore eBooks	To know that an Ebook is a paperless way of presenting information and can be done using a variety of IT skills.	Colour, style, formatting, position, text, images, resizing, navigation, embed, voiceover, audio, object, hyperlink
	2	Adding pages to an eBook and formatting.	To know how to add pages, colour and style to an Ebook. To know how to add, position and format text on different pages.	
	4	Adding images to an eBook	To know how to add and position images from camera/web. To know how to add and format shapes.	
	5	Adding audio to an eBook	To know how to add audio, including hiding it behind an object. To know how to add and format shapes.	

\*ongoing skill throughout year