2021 / 2022 Computing Yearly Overview and Plan

Topic
Digital Literacy
Information Technology
Control Systems

Cycle 1 AUT 1 **E-Safety** **Basic Skills Y1 - keyboard / trackpad skills** **Digiduck and digiworld - childnet Y2** **Be internet awesome Y3 & Y4** **Be internet awesome Y5 & Y6**							
Year Group	**1**	**2**	**3**	**4**	**5**	**6**	**Notes**
AUT 1	Orientation - Chromebooks, GSuite, Classroom	Orientation - Chromebooks, GSuite, Classroom	Orientation - Chromebooks, GSuite, Classroom	Orientation - Chromebooks, GSuite, Classroom	Orientation - Chromebooks, GSuite, Classroom	Orientation - Chromebooks, GSuite, Classroom	
	Basic Skills GSuite	Basic Skills GSuite	Basic Skills GSuite	Basic Skills GSuite	Basic Skills GSuite	Basic Skills GSuite	
	Log onto a Computer	Use technology respectfully	Use technology responsibly	Recognise acceptable and unacceptable behaviour using technology	Understand what makes a strong password and why this is important at school and in the wider world	Demonstrate responsible use of online services and technologies, and know a range of ways to report	

					concerns	
	Use a mouse or trackpad effectively to navigate websites	Understand where/how to seek help when they have concerns about content	Identify a range of ways to share concerns about conduct	Know how to respond to unpleasant communications via texts, IM, email or chat rooms.	Know what to do and who to contact if we see something that upsets / concerns us online.	Understand the impact of an individual sending or uploading unkind or inappropriate content.	
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	Log onto a Computer	Understand where/how to seek help when they have concerns about content	Identify a range of ways to share concerns about conduct	Know how to respond to unpleasant communications via texts, IM, email or chat rooms.	Understand that everything we do online leaves a digital footprint that can last forever.	I can produce formal or informal messages, appropriate to the task	
	Recognise common uses of technology beyond school	Understand where/how to seek help when they have concerns about content	Recognise the benefits and risks of different apps and websites	Be discerning in evaluating digital content	Know where to find copyright free images and audio, and why this is important	Become increasingly savvy online consumers: know that algorithms are used to track online activities with a view to targeting advertising and information	

HALF TERM

Cycle 1 AUT 2

Information Technology

Basic Skills Y1
Composing Music Y2
Animation / photo editing Y3 & Y4
(Y5 cycle 1 AUT1) Website creation - Y6

Year Group	1	2	3	4	5	6	
	Use a mouse or trackpad effectively to navigate websites	Use software to explore sound and musical phrases.	Use technology to collaborate on a task	Use a range of tools to edit and enhance media for particular effect	Understand the benefits of technology to collaborate with others	Collaborate with individuals and groups to create digital content for a specific purpose.	
	Use a mouse or trackpad effectively to navigate websites	Use software to explore sound and musical phrases.	Use technology to collaborate on a task	Use a range of tools to edit and enhance media for particular effect	Understand the benefits of technology to collaborate with others	Collaborate with individuals and groups to create digital content for a specific purpose.	

  	Keep personal information private	Use software to explore sound and musical phrases.	Edit digital content in response to feedback	Use technology to collaborate on a task	Recognise an audience when designing and creating digital content .	Collaborate with individuals and groups to create digital content for a specific purpose.	
	Use a mouse or trackpad effectively to navigate websites	Use software to explore sound and musical phrases.	Edit digital content in response to feedback	Use a range of tools to edit and enhance media for particular effect	Understand the benefits of technology to collaborate with others	Collaborate with individuals and groups to create digital content for a specific purpose.	
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Cycle 2							
PRE-CHRISTMA	Use a mouse or trackpad effectively to navigate websites	Use software to explore sound and musical phrases.	Use technology to collaborate on a task	Use a range of tools to edit and enhance media for particular effect	Understand the benefits of technology to collaborate with others	Collaborate with individuals and groups to create digital content for a specific purpose.	

END OF TERM

Cycle 2 SPR 1
Control systems

Following instructions - unplugged Y1
Introduction to block coding Y2
Block coding Y3, Y4, Y5, Y6

Year Group	1	2	3	4	5	6	
	Understand what algorithms are	Understand that programmes run by following precise instructions	Work with various forms of input and output	Understand computer networks, e.g. the internet	Understand how computer networks work including the internet	I recognise that different solutions can exist for the same problem	
	Create simple programmes	Understand that algorithms are implemented as programmes on digital devices	Use sequence in programmes	I can experiment with variables to control models	Use selection within programs	Use logical reasoning to detect errors in algorithms	
		Use logical reasoning to predict the behaviour of programmes	Write programmes that create specific goals	I can make accurate predictions about what I think will happen	I can combine sequences of instructions to turn an external device on	Refine a program based on end user feedback.	

					and off		
		Debug simple programmes		Use sequence, selection and repetition in programs; work with variables.	Use logical reasoning to detect errors in algorithms	I can explore 'what if' questions by planning different scenarios for controlled devices	
				Design, write and debug programmes that perform specific goals.		Combine a variable with relational operators (< = >) to determine when a program changes, e.g. if score > 5, say "well done"	
						Can design a physical computing system that uses sensors, e.g. using a flow chart	

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<mark>eSafety revisit.</mark>	Keep personal information private	Identify a range of ways to share concerns about conduct	Know how to respond to unpleasant communications via texts, IM, email or chat rooms.	Know what to do and who to contact if we see something that upsets / concerns us online.	Understand the impact of an individual sending or uploading unkind or inappropriate content.	Understand where/how to seek help when they have concerns about content	

Information Technology
Cycle 2

Basic web navigation Y1

	Digital photograph Y2 **Collecting Information Y3, Y4** **Ranking Search results Y5, Y6**						
Year Group	**1**	**2**	**3**	**4**	**5**	**6**	
	Use a mouse or trackpad effectively to navigate websites	Take digital photographs and record video	Use technology to collect information	I can evaluate and analyse information	Understand how search results are ranked	Appreciate how search results are ranked	
		Begin to change or enhance photographs and pictures (crop, recolour).	Use search technology to communicate effectively		Use filters in a database to find out specific information	Find suitable images, video and sounds from appropriate sources, taking into account copyright issues.	
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Information Technology **Cycle 2** **Basic web navigation Y1**							

Digital photograph Y2
Collecting Information Y3, Y4
Ranking Search results Y5, Y6

		Begin to change or enhance photographs and pictures (crop, recolour).	Use search technology to communicate effectively		Use filters in a database to find out specific information	Find suitable images, video and sounds from appropriate sources, taking into account copyright issues.	
			Use a database to retrieve information		Understand the benefits of technology to collaborate with others	Remix and edit a range of media to create content.	
	Save and reopen work on a digital device	Use ICT to source, generate and amend images.		I can collect and present data in different ways	Recognise an audience when designing and creating digital content .	Collaborate with individuals and groups to create digital content for a specific purpose.	
			Present data in a range of ways to convey information	I can use technology to collaborate in different ways	Select and combine software on a range of devices	Use ICT to create and modify charts quickly and easily.	
	Use technology to store digital content	Create a simple animation using still images		Use a range of tools to edit and enhance media for particular effect	Select and use suitable software and hardware to produce a multimedia soundtrack	Discuss and explore the use of ICT to sort, organise and classify objects based on their properties.	

		Use technology to create, communicate and collaborate	Edit digital content in response to feedback	Design and create digital content for a specific purpose	Identify and use appropriate hardware and software to fulfil a specific task	Create databases, retrieve information and draw conclusions based on results entered.	
		Use software to explore sound and musical phrases.	Use technology to collaborate on a task	Use ICT to compose music or sounds including creating melodies	Create different types of graphs and charts that are appropriate to the data I am using; use them to interpret and answer a specific question.	Choose appropriate hardware to capture and review a range of images, considering lighting, positioning, sound quality and angle.	
	Use technology to create content	Discuss and explore how to use ICT to organise, present and understand data as a simple graph.		Storyboard and shoot a short stop motion animated sequence.	Capture/review different images, considering lighting, positioning and angle appropriate to a given task/audience	Use appropriate ICT resources to compose music or sounds to accompany a story.	

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		Use technology to organise digital content		I can select and use software to accomplish given goals	Generate, amend and combine visual media from different sources for a specific audience or task.	Select and combine software on a range of devices	

				Understand the dangers of spending too long online and the importance of regular screen breaks.		Begin to question information based on author and location; recognise different viewpoints and the impact of incorrect data.	
	Assessment	Assessment	Assessment	Assessment	Assessment	Assessment	