Computing Curriculum Overview   Year 3

Term	Computing Topic	Knowledge and understanding	What I will know and remember	Vocabulary
Online Safety KS2: Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.				
1	**Unit 3.1 – Computing systems and networks – Connecting computers**	I can 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.	I can explain how digital devices function I can identify input and output devices I can recognise how digital devices can change the way we work I can explain how a computer network can be used to share information I can explore how digital devices can be connected I can recognise the physical components of a network	Connection Digital device Input Network Network switch Output Process Secure Server Wireless access point (WAP)
Online Safety: Self Image and Identity (Education For A Connected World)				

End of unit assessment

Working towards	Working at	Working above

2	Unit 3.5 - Programming A – Sequence in music	I can design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. I can use sequence, selection, and repetition in programs; work with variables and various forms of input and output. I can use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	I can explore a new programming environment I can identify that each sprite is controlled by the commands I choose I can explain that a program has a start I can recognise that a sequence of commands can have an order I can change the appearance of my project I can create a project from a task description	Backdrop Blocks Bug Code Glide Motion Programming Scratch Sequence

Online Safety: Online Relationships
(Education For A Connected World)

End of unit assessment		
<u>**Working towards**</u>	<u>**Working at**</u>	<u>**Working above**</u>

3	Unit 3.4 - Data and Information - Branching Databases	I can 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	I can understand the terminology around databases I can compare paper and computerised databases I can sort, filter and interpret data I can represent data in different ways I can sort data for a purpose	Advantages Benefits Communicate Desktop publishing

				Disadvantages Font/font style Landscape Layout Placeholder Portrait Orientation Template
		accomplish given goals, including collecting, analysing, evaluating and presenting data and information.		

Online Safety: Online Reputation & Online Bullying
(Education For A Connected World)

<table>
<tr><td colspan="5" align="center"><u>End of unit assessment</u></td></tr>
<tr><td colspan="2"><u>Working towards</u></td><td colspan="2" align="center"><u>Working at</u></td><td align="right"><u>Working above</u></td></tr>
<tr><td>4</td><td>Unit 3.2 – Creating media – Animation</td><td>I can 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</td><td>I can explain that animation is a sequence of drawings or photographs
I can relate animated movement with a sequence of images
I can plan an animation
I can identify the need to work consistently and carefully
I can evaluate the impact of adding other media to an animation</td><td>Animation
Consistency
Evaluation
Flip book
Frame
Import
Onion skinning
Media
Transition</td></tr>
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		Working towards	End of unit assessment Working at	Working above
5	**Unit 3.6 – Programming B – Events and actions**	I can design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. I can use sequence, selection, and repetition in programs; work with variables and various forms of input and output. I can use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	I can break an open-ended problem up into smaller parts. I can put programming commands into a sequence to achieve a specific outcome. I keep testing my program and can recognise when I need to debug it. I can use repeat commands. I can describe the algorithm I will need for a simple task. I can detect a problem in an algorithm which could result in unsuccessful programming.	Backdrop Blocks Code Glide Loop Scratch Sequence

Online Safety: Health, Wellbeing and Lifestyle
(Education For A Connected World)

			End of unit assessment	
	Working towards		**Working at**	**Working above**
6	**Unit 3.3 Creating media – Desktop publishing**	I can 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	I can recognise how text and images convey information I can recognise that text and layout can be edited I can choose appropriate page settings I can add content to a desktop publishing publication I can consider how different layouts can suit different purposes I can consider the benefits of desktop publishing	Database Data logger Data types Field Information Questioning Record/Recording

Online Safety: Privacy and Security & Copyright and Ownership
(Education For A Connected World)

		End of unit assessment	
Working towards		**Working at**	**Working above**