		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
NW	Networks		To recognise the uses and features of information technologyTo identify the uses of information technology in the schoolTo identify information technology beyond schoolTo explain how information technology helps usTo explain how to use information technology safelyTo recognise that choices are made when using information technology	To explain how a computer network can be used to share information To explore how digital devices can be connected To recognise the physical components of a network	To describe how networks physically connect to other networksTo recognise how networked devices make up the internetTo outline how websites can be shared via the World Wide WebTo describe how content can be added and accessed on the World Wide WebTo recognise how the content of the WWW is created by peopleTo evaluate the consequences of unreliable content	To contribute to a shared project online To evaluate different ways of working together online	<ul> <li>To identify how to use a search engine</li> <li>To describe how search engines select results</li> <li>To explain how search results are ranked</li> <li>To recognise why the order of results is important, and to whom</li> <li>To recognise how we communicate using technology</li> <li>To evaluate different methods of online communication</li> <li>To review an existing website and consider its structure</li> <li>To outline the need for a navigation path</li> <li>To recognise the implications of linking to content owned by other people</li> </ul>
СМ	Creating Media	To describe what different freehand tools do To use the shape tool and the line tools To make careful choices when painting a digital picture To explain why I chose the tools I used To use a computer on my own to paint a picture	To use a digital device to take a photograph To make choices when taking a photograph To describe what makes a good photograph To decide how photographs can be improved To use tools to change an image To recognise that photos can be changed	To explain that animation is a sequence of drawings or photographs To relate animated movement with a sequence of images To plan an animation To identify the need to work consistently and carefully To review and improve an animation To evaluate the impact of adding other media to an animation To explore a new programming environment	To describe how content can be added and accessed on the World Wide Web To use a digital device to record sound: To explain that a digital recording is stored as a file: To explain that audio can be changed through editing: To show that different types of audio can be combined and played together: To evaluate editing choices made:	To recognise video as moving pictures, which can include audio To identify digital devices that can record video To capture video using a digital device To recognise the features of an effective video To identify that video can be improved through reshooting and editing To consider the impact of the choices made when making and sharing a video	To review an existing website and consider its structure To plan the features of a web page To consider the ownership and use of images (copyright) To recognise the need to preview pages To outline the need for a navigation path To recognise the implications of linking to content owned by other people To choose suitable ways to present data

		To compare painting a picture on		I can identify that each sprite is controlled by the commands I	To explain that digital images	To identify that drawing tools	To use a computer to create and
		a computer and on paper	To say how music can make us feel	choose	can be changed	can be used to produce different outcomes	manipulate three-dimensional (3D) digital objects
		To use a computer to write		To explain that a program has a start	To change the composition of an image	To create a vector drawing by	To compare working digitally
		To add and remove text on a	To identify that there are		To describe how inserve can be	combining shapes	with 2D and 3D graphics
		computer	patterns in music	To recognise that a sequence of commands can have an order	To describe how images can be changed for different uses	To use tools to achieve a desired effect	To construct a digital 3D model of a physical object
		To identify that the look of text can be changed on a computer	To show how music is made from a series of notes	To change the appearance of my project	To make good choices when selecting different tools	To recognise that vector drawings consist of layers	To identify that physical objects can be broken down into a
		To make careful choices when	To show how music is made from a series of notes	To create a project from a task description To create questions with yes/no	To recognise that not all images are real	To group objects to make them easier to work with	collection of 3D shapes To design a digital model by
		changing text	To create music for a purpose	answers To identify the object attributes	To evaluate how changes can improve an image	To evaluate my vector drawing	combining 3D objects To develop and improve a digita
		To explain why I used the tools that I chose	To review and refine our computer work	needed to collect relevant data To create a branching database			3D model
		To compare typing on a computer		To identify objects using a branching database			
		to writing on paper		To explain why it is helpful for a database to be well structured			
				To compare the information shown in a pictogram with a branching database			
				To recognise how text and images convey information			
				To recognise that text and layout can be edited			
				To choose appropriate page settings			
				To add content to a desktop publishing publication			
				To consider how different layouts can suit different purposes			
				To consider the benefits of desktop publishing			
וח	Data & Information	To label objects	To show how music is made from a series of notes	To create questions with yes/no answers	To explain that a digital recording is stored as a file:	To use a form to record information	To identify questions which can be answered using data
DI				To identify the object attributes needed to collect relevant data		To compare paper and computer-based databases	To explain that objects can be described using data

				To create a branching database	To explain that data gathered	1	
		To identify that objects can be counted	To show how music is made from a series of notes	To identify objects using a branching database	over time can be used to answer questions	To outline how grouping and then sorting data allows us to answer questions	To explain that formula can be used to produce calculated data
		To describe objects in different ways	To recognise that we can count and compare objects	To explain why it is helpful for a database to be well structured	To use a digital device to collect data automatically	To explain that tools can be used to select specific data	To apply formulas to data, including duplicating
		To count objects with the same properties	using tally charts To recognise that objects can be represented as	To compare the information shown in a pictogram with a branching database	To explain that a data logger collects 'data points' from sensors over time	To explain that computer programs can be used to	To create a spreadsheet to plan an event
		To compare groups of objects	pictures		To use data collected over a long duration to find information	compare data visually To apply my knowledge of a	To choose suitable ways to present data
		To answer questions about groups of objects	To create a pictogram		To identify the data needed to	database to ask and answer real- world questions	
			To select objects by attribute and make comparisons		answer questions To use collected data to answer questions	To identify that drawing tools can be used to produce different outcomes	
			To recognise that people can be described by attributes				
			To explain that we can present information using a computer				
		To explain why I chose the tools I used	To describe what makes a good photograph	To plan an animation To identify the need to work	To use a digital device to record sound:	To evaluate different ways of working together online	To evaluate different methods of online communication
		To compare painting a picture on a computer and on paper	To decide how photographs can be improved	consistently and carefully To review and improve an	To explain that a digital recording is stored as a file:	To recognise video as moving pictures, which can include audio	To review an existing website and consider its structure
		To explain why I used the tools that I chose	To create music for a purpose	animation	To evaluate editing choices made:	To recognise the features of an	To plan the features of a web page
		To plan a simple program	To explain that programming projects can have code and artwork	To evaluate the impact of adding other media to an animation	To describe how images can be	effective video	To consider the ownership and
DD	Design & Development	To design the parts of a project	To design an algorithm	To change the appearance of my project To create a project from a task	changed for different uses To evaluate how changes can	To consider the impact of the choices made when making and sharing a video	use of images (copyright) To recognise the need to
		<b>T</b>	To create and debug a program that I have written	To explain why it is helpful for a database to be well structured	improve an image To develop the use of count- controlled loops in a different	To design a physical project that includes selection	preview pages To outline the need for a navigation path
		To use my algorithm to create a program	To create a program using a given design	To compare the information shown in a pictogram with a branching database	To develop a design which includes two or more loops	To create a controllable system that includes selection To compare paper and	To recognise the implications of linking to content owned by other people
			To change a given design	To consider how different layouts can suit different purposes	which run at the same time	computer-based databases	To choose how to improve a game by using variables

			1	To consider the here the st	The state of the s	1	
			To create a program using my own design	To consider the benefits of desktop publishing To identify and fix bugs in a	To design a project that includes repetition	To design a program which uses selection	To design a project that builds on a given example
			To decide how my project can be improved	program To design and create a maze-	To create a project that includes repetition	To create a program which uses selection	To use my design to create a project
				based challenge		To evaluate my program	To evaluate my project
							To design a digital model by combining 3D objects
							To develop and improve a digital 3D model
							To design a project that uses inputs and outputs on a controllable device
							To develop a program to use inputs and outputs on a controllable device
		To identify technology	To recognise the uses and features of information technology	To explain how digital devices function	To identify that sound can be digitally recorded:	To explain that computers can be connected together to form systems	To create a program to run on a controllable device
		To identify a computer and its main parts	To identify the uses of information technology in the school	To identify input and output devices	To use a digital device to record sound:	To recognise the role of computer systems in our lives	To explain that selection can control the flow of a program
		To use a mouse in different ways	To identify information technology beyond school	To recognise how digital devices can change the way we work	To use a digital device to collect data automatically	To identify digital devices that can record video	To update a variable with a user input
		To use a keyboard to type on a computer	To explain how information technology helps us	To explain how a computer network can be used to share information	To explain that a data logger collects 'data points' from sensors over time	To control a simple circuit connected to a computer	To use an conditional statement to compare a variable to a value
CS	Computing Systems	To use the keyboard to edit text	To explain how to use information technology safely	To explore how digital devices can be connected	To identify the data needed to answer questions	To write a program that includes count-controlled loops	To design a project that uses inputs and outputs on a controllable device
		To create rules for using technology responsibly	To recognise that choices are made when using information technology	To recognise the physical components of a network	To use collected data to answer questions	To explain that a loop can stop when a condition is met, eg number of times	To develop a program to use inputs and outputs on a controllable device
			To use a digital device to take a photograph			To design a physical project that includes selection	
			To make choices when taking a photograph			To create a controllable system that includes selection	

IT	Impact of Technology	To identify technology To act out a given word	To identify the uses of information technology in the school To identify information technology beyond school To explain how information technology helps us To recognise that choices are made when using information technology	To recognise how digital devices can change the way we work To consider the benefits of desktop publishing	To evaluate the consequences of unreliable content To change the composition of an image	To recognise the role of computer systems in our lives To explain how sharing information online lets people in different places work together	To recognise why the order of results is important, and to whom To recognise the implications of linking to content owned by other people
AL	Algorithms	To explain what a given command w To act out a given word To plan a simple program To find more than one solution to a To use my algorithm to create a program	instructions as a sequence To explain what happens when we change the order of instructions	To create a project from a task description	To identify that accuracy in programming is important To explain what 'repeat' means To decompose a program into parts To explain that in programming there are infinite loops and count controlled loops	To explain how selection is used in computer programs To relate that a conditional statement connects a condition to an outcome To explain how selection directs the flow of a program	
PG	Programming	To combine forwards and backwards commands to make a sequence To combine four direction command make sequences To choose a command for a given purpose	To use logical reasoning to predict the outcome of a program (series of commands) To explain that programming projects can have code and	To explore a new programming environment I can identify that each sprite is controlled by the commands I choose To explain that a program has a start To recognise that a sequence of commands can have an order To change the appearance of my project To create a project from a task description	To identify that accuracy in programming is important To create a program in a text- based language To explain what 'repeat' means To modify a count-controlled loop to produce a given outcome To decompose a program into parts	To control a simple circuit connected to a computer To write a program that includes count-controlled loops To explain that a loop can stop when a condition is met, eg number of times To conclude that a loop can be used to repeatedly check whether a condition has been met	To define a 'variable' as something that is changeable To explain why a variable is used in a program To choose how to improve a game by using variables To design a project that builds on a given example To use my design to create a project

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		To show that a series of commands of	anTo create a program using a	To explain how a sprite moves in	To create a program that uses	To design a physical project that	To evaluate my project
		be joined together	given design	an existing project	count-controlled loops to	includes selection	
					produce a given outcome		To explain that formula can be
		To identify the effect of changing a	To the second strength strength	To create a program to move a		To create a controllable system	used to produce calculated data
		value	To change a given design	sprite in four directions	To develop the use of count-	that includes selection	
					controlled loops in a different		To apply formulas to data,
		To explain that each sprite has its ow instructions	<sub>/n</sub> To create a program using my own design	To adapt a program to a new context	programming environment	To explain how selection is used in computer programs	including duplicating
			, .	To develop my program by	To explain that in programming		To create a program to run on a
		To design the parts of a project	To decide how my project can be improved	adding features	there are infinite loops and count controlled loops	To relate that a conditional statement connects a condition	controllable device
				To identify and fix bugs in a		to an outcome	To explain that selection can
		To use much solution in the second solution		program	To develop a design which		control the flow of a program
		To use my algorithm to create a			includes two or more loops	To explain how selection directs	
		program		To design and create a maze-	which run at the same time	the flow of a program	To update a variable with a user
				based challenge			input
					To modify an infinite loop in a	To design a program which uses	
					given program	selection	To use an conditional statement
							to compare a variable to a value
					To design a project that includes	To create a program which uses	
					repetition	selection	To design a project that uses
						To evaluate my program	inputs and outputs on a
					To create a project that includes repetition		controllable device
							To develop a program to use
							inputs and outputs on a
							controllable device
		To use a mouse in different		To explain that animation is a	To use a digital device to record	To contribute to a shared project	To identify how to use a search
		To use a mouse in different ways	To make choices when taking a photograph	sequence of drawings or photographs	sound:	online	engine
		To use a keyboard to type on a computer	To decide how photographs can be improved	To relate animated movement with a sequence of images	To explain that a digital recording is stored as a file:	To evaluate different ways of working together online	To describe how search engines select results
		To use the keyboard to edit		To identify the need to work	To explain that audio can be	To recognise the features of an	To explain how search results
		text	To use tools to change an image	consistently and carefully	changed through editing:	effective video	are ranked
				To review and improve an	To show that different types of	To identify that video can be	To recognise why the order of
		To create rules for using		animation	audio can be combined and	improved through reshooting	results is important, and to
	Effortive Llos of tools	technology responsibly	To recognise that photos		played together:	and editing	whom
ET	Effective Use of tools		can be changed	To evaluate the impact of adding			
				other media to an animation	To create a program in a text-	To consider the impact of the	To recognise how we
		To describe what different	To prooto music for -	To explore a new programming	based language	choices made when making and	communicate using technology
		freehand tools do	To create music for a	environment		sharing a video	
			purpose		To use a digital device to collect		To evaluate different methods of
			To review and refine our	To create a branching database	data automatically	To use a form to record	online communication
		To use the shape tool and	computer work			information	
		the line tools		To identify objects using a branching database	To explain that a data logger		To recognise the need to
			To recognise that objects		collects 'data points' from	To explain that tools can be used	preview pages
		To make careful choices	can be represented as	To explain why it is helpful for a	sensors over time	to select specific data	
		when painting a digital	pictures	database to be well structured			To outline the need for a
		picture					navigation path

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			<b>_</b>	To recognise that text and layout	To use data collected over a long	To explain that computer	
		To explain why I chose the	To create a pictogram	can be edited	duration to find information	programs can be used to	To recognise the implications of
		tools I used		To choose appropriate page		compare data visually	linking to content owned by
				settings	To identify the data needed to		other people
			To select objects by attribute		answer questions	To apply my knowledge of a	
		To use a computer on my own to paint a picture	and make comparisons	To add content to a desktop		database to ask and answer real-	To explain that formula can be
				publishing publication	To explain that digital images	world questions	used to produce calculated data
				To consider how different layouts	can be changed	To identify that due to the	To opphy formula to 1
			To recognise that people can	can suit different purposes	To change the service of	To identify that drawing tools	To apply formulas to data,
		To compare painting a	be described by attributes		To change the composition of an image	can be used to produce different outcomes	including duplicating
		picture on a computer and		To consider the benefits of	indge	Jucomes	To create a spreadsheet to plan
		on paper	To explain that we can	desktop publishing	To describe how images can be	To create a vector drawing by	an event
			present information using a		changed for different uses	combining shapes	
			computer	To explain how a sprite moves in an existing project		Sector and Suches	To choose suitable ways to
		To use a computer to write			To make good choices when	To use tools to achieve a desired	present data
				To create a program to move a	selecting different tools	effect	
		To add and remove text on a		sprite in four directions		1	To use a computer to create and
		computer			To recognise that not all images	To recognise that vector	manipulate three-dimensional
					are real	drawings consist of layers	(3D) digital objects
		To identify that the look of			1	· · ·	
		text can be changed on a			To evaluate how changes can	To group objects to make them	To compare working digitally
		computer			improve an image	easier to work with	with 2D and 3D graphics
		To make a set of the t			1	1	l
		To make careful choices			1	1	To construct a digital 3D model
		when changing text			1	1	of a physical object
		To explain why I used the			1	1	l
		tools that I chose			1	1	To identify that physical objects
1					1	1	can be broken down into a
1		To compare typing on a			1	1	collection of 3D shapes
		computer to writing on paper			1	1	
1					1	1	To design a digital model by
1					1	1	combining 3D objects
1					1	1	To dovalon and impress - district
					1	1	To develop and improve a digital 3D model
	<u> </u>	To create rules for using	To recognise the uses and	+,	1	To capture video using a digital	To consider the ownership and
		technology responsibly	features of information		1	device	use of images (copyright)
			technology		1	1	
1					1	1	1
			To evoluin how to use		1	1	l
			To explain how to use information technology safely		1	1	l
SS	Safety & Security				1	1	l
1			To recognise that choices are		1	1	1
1			made when using information		1	1	l
1			technology To explain that we can present		1	1	l
			information using a computer		1	1	1
					1	1	
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