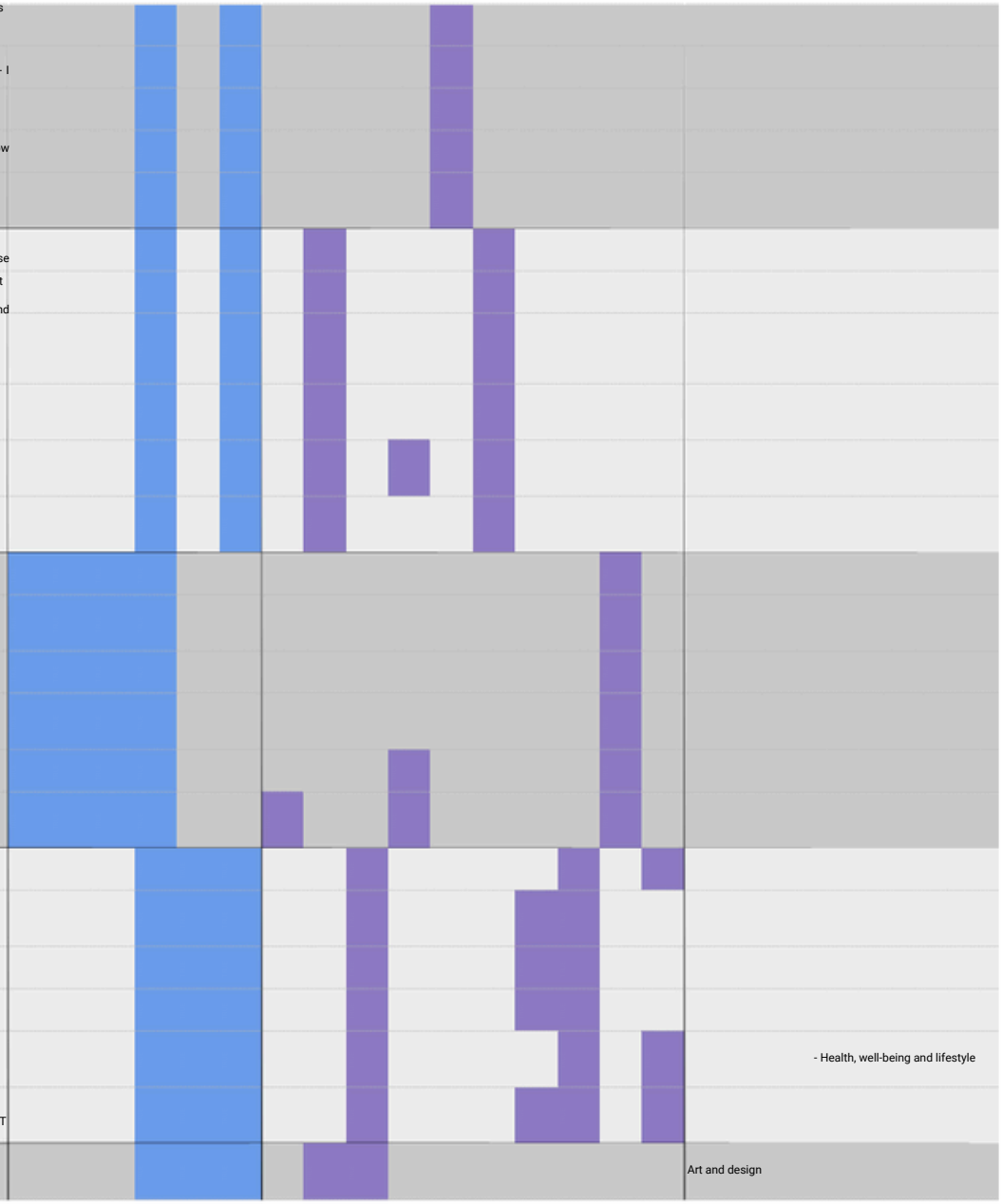
Year Group	Suggested Order	Unit Name	Lesson	Learning Objectives	Success Criteria	National Curriculum Links						Teach Computing Taxonomy										Cross Curricular Links	Education for a Connected World
						1.1	1.2	1.3	1.4	1.5	1.6	AL	CM	CS	DD	DI	ET	IT	NW	PG	SS		
1	1	Computing systems and networks – Technology around us	1	-To identify technology	-I can explain how these technology examples help us - I can explain technology as something that helps us - I can locate examples of technology in the classroom				■	■	■			■				■					Health, well-being and lifestyle Self Image and identity Managing Online Information
1	1	Computing systems and networks – Technology around us	2	-To identify a computer and its main parts	-I can name the main parts of a computer - I can switch on and log into a computer - I can use a mouse to click and drag				■	■	■			■									
1	1	Computing systems and networks – Technology around us	3	-To use a mouse in different ways	-I can click and drag to make objects on a screen - I can use a mouse to create a picture - I can use a mouse to open a program				■	■	■			■			■						
1	1	Computing systems and networks – Technology around us	4	-To use a keyboard to type on a computer	-I can save my work to a file - I can say what a keyboard is for - I can type my name on a computer				■	■	■			■			■						Copyright and ownership
1	1	Computing systems and networks – Technology around us	5	-To use the keyboard to edit text	-I can delete letters - I can open my work from a file - I can use the arrow keys to move the cursor				■	■	■			■			■						
1	1	Computing systems and networks – Technology around us	6	-To create rules for using technology responsibly	-I can discuss how we benefit from these rules - I can give examples of some of these rules - I can identify rules to keep us safe and healthy when we are using technology in and beyond the home				■	■	■			■			■				■		
1	2	Creating media – Digital painting	1	-To describe what different freehand tools do	-I can draw lines on a screen and explain which tools I used - I can make marks on a screen and explain which tools I used - I can use the paint tools to draw a picture				■				■				■					Art and Design	
1	2	Creating media – Digital painting	2	-To use the shape tool and the line tools	-I can make marks with the square and line tools - I can use the shape and line tools effectively - I can use the shape and line tools to recreate the work of an artist				■				■				■					Art and Design	
1	2	Creating media – Digital painting	3	-To make careful choices when painting a digital picture	-I can choose appropriate shapes - I can create a picture in the style of an artist - I can make appropriate colour choices				■				■				■					Art and Design	
1	2	Creating media – Digital painting	4	-To explain why I chose the tools I used	-I can choose appropriate paint tools and colours to recreate the work of an artist - I can say which tools were helpful and why - I know that different paint tools do different jobs				■				■		■		■					Art and Design	
1	2	Creating media – Digital painting	5	-To use a computer on my own to paint a picture	-I can change the colour and brush sizes - I can make dots of colour on the page - I can use dots of colour to create a picture in the style of an artist on my own				■				■				■					Art and Design	
1	2	Creating media – Digital painting	6	-To compare painting a picture on a computer and on paper	-I can explain that pictures can be made in lots of different ways - I can say whether I prefer painting using a computer or using paper - I can spot the differences between painting on a computer and on paper				■				■		■		■					Art and Design	
1	3	Programming A – Moving a robot	1	-To explain what a given command will do	-I can match a command to an outcome - I can predict the outcome of a command on a device - I can run a command on a device	■	■	■		■		■										English – writing	
1	3	Programming A – Moving a robot	2	-To act out a given word	-I can follow an instruction - I can give directions - I can recall words that can be acted out	■	■	■		■		■						■				English – writing	
1	3	Programming A – Moving a robot	3	-To combine forwards and backwards commands to make a sequence	-I can compare forwards and backwards movements - I can predict the outcome of a sequence involving forwards and backwards commands - I can start a sequence from the same place	■	■	■		■										■		English – writing	
1	3	Programming A – Moving a robot	4	-To combine four direction commands to make sequences	-I can compare left and right turns - I can experiment with turn and move commands to move a robot - I can predict the outcome of a sequence involving up to four commands	■	■	■		■										■		English – writing	
1	3	Programming A – Moving a robot	5	-To plan a simple program	-I can choose the order of commands in a sequence - I can debug my program - I can explain what my program should do	■	■	■		■		■			■							English – writing	
1	3	Programming A – Moving a robot	6	-To find more than one solution to a problem	-I can identify several possible solutions - I can plan two programs - I can use two different programs to get to the same place	■	■	■		■		■										English – writing	
1	4	Data and information – Grouping data	1	-To label objects	-I can describe objects using labels - I can identify the label for a group of objects - I can match objects to groups				■		■					■							

1	4	Data and information – Grouping data	2	-To identify that objects can be counted	-I can count a group of objects - I can count objects - I can group objects -I can describe an object	
1	4	Data and information – Grouping data	3	-To describe objects in different ways	- I can describe a property of an object - I can find objects with similar properties -I can count how many objects share a property - I can group objects in more than one way	
1	4	Data and information – Grouping data	4	-To count objects with the same properties	- I can group similar objects -I can choose how to group objects	
1	4	Data and information – Grouping data	5	-To compare groups of objects	- I can describe groups of objects - I can record how many objects are in a group -I can compare groups of objects - I can decide how to group objects to answer a question	
1	4	Data and information – Grouping data	6	-To answer questions about groups of objects	- I can record and share what I have found -I can identify and find keys on a keyboard - I can open a word processor	
1	5	Creating media – Digital writing	1	-To use a computer to write	- I can recognise keys on a keyboard -I can enter text into a computer - I can use backspace to remove text - I can use letter, number, and space keys	
1	5	Creating media – Digital writing	2	-To add and remove text on a computer	-I can explain what the keys that I have learnt about already do - I can identify the toolbar and use bold, italic, and underline	
1	5	Creating media – Digital writing	3	-To identify that the look of text can be changed on a computer	- I can type capital letters -I can change the font - I can select all of the text by clicking and dragging	
1	5	Creating media – Digital writing	4	-To make careful choices when changing text	- I can select a word by double-clicking -I can decide if my changes have improved my writing - I can say what tool I used to change the text	
1	5	Creating media – Digital writing	5	-To explain why I used the tools that I chose	- I can use 'undo' to remove changes -I can explain the differences between typing and writing - I can make changes to text on a computer	
1	5	Creating media – Digital writing	6	-To compare typing on a computer to writing on paper	- I can say why I prefer typing or writing -I can compare different programming tools - I can find which commands to move a sprite	
1	6	Programming B - Programming animations	1	-To choose a command for a given purpose	- I can use commands to move a sprite -I can run my program	
1	6	Programming B - Programming animations	2	-To show that a series of commands can be joined together	- I can use a Start block in a program - I can use more than one block by joining them together	
1	6	Programming B - Programming animations	3	-To identify the effect of changing a value	-I can change the value - I can find blocks that have numbers - I can say what happens when I change a value	
1	6	Programming B - Programming animations	4	-To explain that each sprite has its own instructions	-I can add blocks to each of my sprites - I can delete a sprite - I can show that a project can include more than one sprite	
1	6	Programming B - Programming animations	5	-To design the parts of a project	-I can choose appropriate artwork for my project - I can create an algorithm for each sprite - I can decide how each sprite will move	
1	6	Programming B - Programming animations	6	-To use my algorithm to create a program	-I can add programming blocks based on my algorithm - I can test the programs I have created - I can use sprites that match my design	
2	1	Computing systems and networks – IT around us	1	-To recognise the uses and features of information technology	-I can describe some uses of computers - I can identify examples of computers - I can identify that a computer is a part of IT -I can identify examples of IT - I can identify that some IT can be used in more than one way	
2	1	Computing systems and networks – IT around us	2	-To identify the uses of information technology in the school	- I can sort school IT by what it's used for -I can find examples of information technology - I can sort IT by where it is found - I can talk about uses of information technology	
2	1	Computing systems and networks – IT around us	3	-To identify information technology beyond school	-I can demonstrate how IT devices work together - I can recognise common types of technology - I can say why we use IT	
2	1	Computing systems and networks – IT around us	4	-To explain how information technology helps us		
2	1	Computing systems and networks – IT around us	5	-To explain how to use information technology safely	-I can list different uses of information technology - I can say how rules can help keep me safe - I can talk about different rules for using IT	- Health, well-being and lifestyle
2	1		6	-To recognise that choices are made when using information technology	-I can explain the need to use IT in different ways - I can identify the choices that I make when using IT - I can use IT for different types of activities	
2	2	Creating media – Digital photography	1	-To use a digital device to take a photograph	-I can explain what I did to capture a digital photo - I can recognise what devices can be used to take photographs - I can talk about how to take a photograph	Art and design



2	2	Creating media – Digital photography	2	-To make choices when taking a photograph	-I can explain the process of taking a good photograph - I can explain why a photo looks better in portrait or landscape format - I can take photos in both landscape and portrait format -I can discuss how to take a good photograph	Art and design
2	2	Creating media – Digital photography	3	-To describe what makes a good photograph	- I can identify what is wrong with a photograph - I can improve a photograph by retaking it -I can experiment with different light sources	Art and design
2	2	Creating media – Digital photography	4	-To decide how photographs can be improved	- I can explain why a picture may be unclear - I can explore the effect that light has on a photo -I can explain my choices	Art and design
2	2	Creating media – Digital photography	5	-To use tools to change an image	- I can recognise that images can be changed - I can use a tool to achieve a desired effect -I can apply a range of photography skills to capture a photo	Art and design
2	2	Creating media – Digital photography	6	-To recognise that photos can be changed	- I can identify which photos are real and which have been changed - I can recognise which photos have been changed -I can choose a series of words that can be enacted as a sequence	Art and design
2	3	Programming A – Robot algorithms	1	-To describe a series of instructions as a sequence	- I can follow instructions given by someone else - I can give clear instructions -I can show the difference in outcomes between two sequences that consist of the same commands	
2	3	Programming A – Robot algorithms	2	-To explain what happens when we change the order of instructions	- I can use an algorithm to program a sequence on a floor robot - I can use the same instructions to create different algorithms	
2	3	Programming A – Robot algorithms	3	-To use logical reasoning to predict the outcome of a program	-I can compare my prediction to the program outcome - I can follow a sequence - I can predict the outcome of a sequence	
2	3	Programming A – Robot algorithms	4	-To explain that programming projects can have code and artwork	-I can explain the choices I made for my mat design - I can identify different routes around my mat - I can test my mat to make sure that it is usable	
2	3	Programming A – Robot algorithms	5	-To design an algorithm	-I can create an algorithm to meet my goal - I can explain what my algorithm should achieve - I can use my algorithm to create a program	
2	3	Programming A – Robot algorithms	6	-To create and debug a program that I have written	-I can plan algorithms for different parts of a task - I can put together the different parts of my program - I can test and debug each part of the program	
2	4	Data and information – Pictograms	1	-To recognise that we can count and compare objects using tally charts	- I can compare totals in a tally chart - I can record data in a tally chart - I can represent a tally count as a total -I can enter data onto a computer - I can use a computer to view data in a different format	Maths
2	4	Data and information – Pictograms	2	-To recognise that objects can be represented as pictures	- I can use pictograms to answer simple questions about objects -I can explain what the pictogram shows - I can organise data in a tally chart - I can use a tally chart to create a pictogram	Maths
2	4	Data and information – Pictograms	3	-To create a pictogram	-I can answer 'more than'/'less than' and 'most/least' questions about an attribute - I can create a pictogram to arrange objects by an attribute	Maths
2	4	Data and information – Pictograms	4	-To select objects by attribute and make comparisons	- I can tally objects using a common attribute -I can choose a suitable attribute to compare people - I can collect the data I need - I can create a pictogram and draw conclusions from it	Maths
2	4	Data and information – Pictograms	5	-To recognise that people can be described by attributes	-I can give simple examples of why information	Maths
2	4	Data and information – Pictograms	6	-To explain that we can present information using a computer	should not be shared - I can share what I have found out using a computer - I can use a computer program to present information in different ways	Maths
2	5	Creating media - Digital music	1	-To say how music can make us feel	-I can describe music using adjectives - I can identify simple differences in pieces of music - I can say what I do and don't like about a piece of mus ic	Mus ic
2	5	Creating media - Digital music	2	-To identify that there are patterns in music	-I can create a rhythm pattern - I can explain that music is created and played by humans - I can play an instrument following a rhythm pattern -I can connect images with sounds	Mus ic
2	5	Creating media - Digital music	3	-To experiment with sound using a computer	- I can relate an idea to a piece of music - I can use a computer to experiment with pitch	Mus ic

2	5	Creating media - Digital music	4	-To use a computer to create a musical pattern	-I can explain how my music can be played in different ways - I can identify that music is a sequence of notes - I can refine my musical pattern on a computer -I can add a sequence of notes to my rhythm	Mus ic
2	5	Creating media - Digital music	5	-To create music for a purpose	- I can create a rhythm which represents an animal I've chosen - I can create my animal's rhythm on a computer -I can explain how I changed my work	Mus ic
2	5	Creating media - Digital music	6	-To review and refine our computer work	- I can listen to music and describe how it makes me feel - I can review my work -I can identify that a program needs to be started	Mus ic
2	6	Programming B - Programming q uizzes	1	-To explain that a sequence of commands has a start	- I can identify the start of a sequence - I can show how to run my program -I can change the outcome of a sequence of commands	
2	6	Programming B - Programming q uizzes	2	-To explain that a sequence of commands has an outcome	- I can match two sequences with the same outcome - I can predict the outcome of a sequence of commands -I can build the sequences of blocks I need	
2	6	Programming B - Programming q uizzes	3	-To create a program using a given design	- I can decide which blocks to use to meet the design - I can work out the actions of a sprite in an algorithm -I can choose backgrounds for the design	
2	6	Programming B - Programming q uizzes	4	-To change a given design	- I can choose characters for the design - I can create a program based on the new design -I can build sequences of blocks to match my design	
2	6	Programming B - Programming q uizzes	5	-To create a program using my own design	- I can choose the images for my own design - I can create an algorithm -I can compare my project to my design	
2	6	Programming B - Programming q uizzes	6	-To decide how my project can be improved	- I can debug my program - I can improve my project by adding features	

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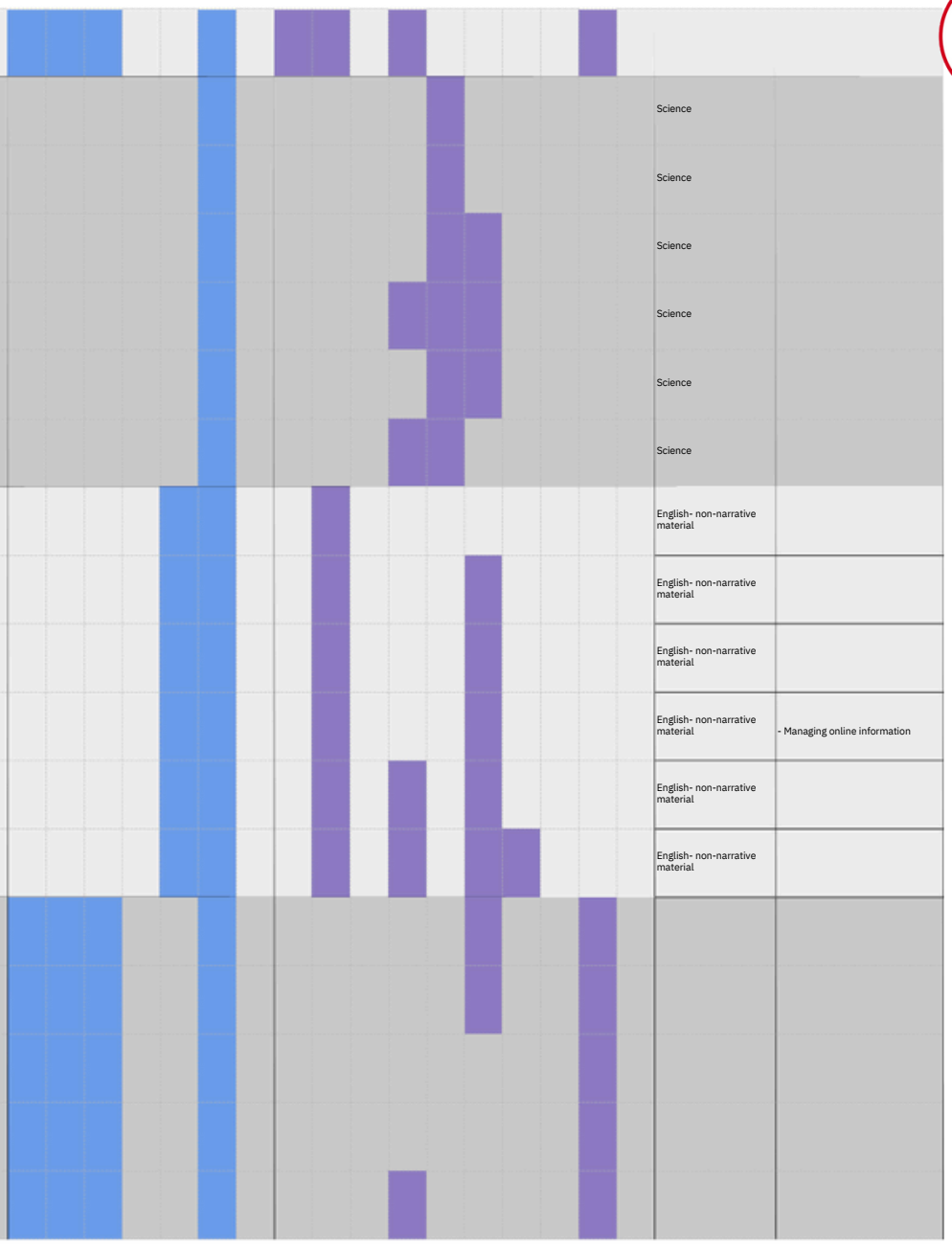
						2.1	2.2	2.3	2.4	2.5	2.6	2.7	AL	CM	CS	DD	DI	ET	IT	NW	PG	SS		
3	1	Computing systems and networks – Connecting computers	1	-To explain how digital devices function	-I can explain that digital devices accept inputs - I can explain that digital devices produce outputs - I can follow a process		■		■		■				■								Maths- number problems	Privacy and Security
3	1	Computing systems and networks – Connecting computers	2	-To identify input and output devices	-I can classify input and output devices - I can describe a simple process - I can design a digital device		■		■		■				■									
3	1	Computing systems and networks – Connecting computers	3	-To recognise how digital devices can change the way we work	-I can explain how I use digital devices for different activities - I can recognise similarities between using digital devices and non-digital tools - I can suggest differences between using digital devices and non-digital tools		■		■		■				■				■				Art and design- techniques	
3	1	Computing systems and networks – Connecting computers	4	-To explain how a computer network can be used to share information	-I can discuss why we need a network switch - I can explain how messages are passed through multiple connections - I can recognise different connections		■		■		■				■					■				
3	1	Computing systems and networks – Connecting computers	5	-To explore how digital devices can be connected	-I can demonstrate how information can be passed between devices - I can explain the role of a switch, server, and wireless access point in a network - I can recognise that a computer network is made up of a number of devices		■		■		■				■					■				
3	1	Computing systems and networks – Connecting computers	6	-To recognise the physical components of a network	-I can identify how devices in a network are connected together - I can identify networked devices around me - I can identify the benefits of computer networks		■		■		■				■					■				
3	2	Creating media - Stop-frame animation	1	-To explain that animation is a sequence of drawings or photographs	-I can create an effective flip book—style animation - I can draw a sequence of pictures - I can explain how an animation/flip book works						■	■		■				■						
3	2	Creating media - Stop-frame animation	2	-To relate animated movement with a sequence of images	-I can create an effective stop-frame animation - I can explain why little changes are needed for each frame - I can predict what an animation will look like						■	■		■				■						
3	2	Creating media - Stop-frame animation	3	-To plan an animation	-I can break down a story into settings, characters and events - I can create a storyboard - I can describe an animation that is achievable on screen						■	■		■		■							English- draft and write narratives	
3	2	Creating media - Stop-frame animation	4	-To identify the need to work consistently and carefully	-I can evaluate the quality of my animation - I can review a sequence of frames to check my work - I can use onion skinning to help me make small changes between frames						■	■		■		■		■					History- the Roman Empire	
3	2	Creating media - Stop-frame animation	5	-To review and improve an animation	-I can evaluate another learner's animation - I can explain ways to make my animation better - I can improve my animation based on feedback						■	■		■		■		■					History- the Roman Empire	
3	2	Creating media - Stop-frame animation	6	-To evaluate the impact of adding other media to an animation	-I can add other media to my animation - I can evaluate my final film - I can explain why I added other media to my animation						■	■		■		■		■					History- the Roman Empire	
3	3	Programming A - Sequencing sounds	1	-To explore a new programming environment	-I can explain that objects in Scratch have attributes (linked to) - I can identify the objects in a Scratch project (sprites, backdrops) - I can recognise that commands in Scratch are represented as blocks		■	■			■							■			■			
3	3	Programming A - Sequencing sounds	2	-To identify that commands have an outcome	-I can choose a word which describes an on-screen action for my plan - I can create a program following a design - I can identify that each sprite is controlled by the commands I choose		■	■			■										■			
3	3	Programming A - Sequencing sounds	3	-To explain that a program has a start	-I can create a sequence of connected commands - I can explain that the objects in my project will respond exactly to the code - I can start a program in different ways		■	■			■										■			
3	3	Programming A - Sequencing sounds	4	-To recognise that a sequence of commands can have an order	-I can combine sound commands - I can explain what a sequence is - I can order notes into a sequence		■	■			■										■			
3	3	Programming A - Sequencing sounds	5	-To change the appearance of my project	-I can build a sequence of commands - I can decide the actions for each sprite in a program - I can make design choices for my artwork		■	■			■					■					■			

3	3	Programming A - Sequencing sounds	6	-To create a project from a task description	-I can identify and name the objects I will need for a project - I can implement my algorithm as code - I can relate a task description to a design		
3	4	Data and information – Branching databases	1	-To create questions with yes/no answers	-I can create two groups of objects separated by one attribute - I can investigate questions with yes/no answers - I can make up a yes/no question about a collection of objects	Science	
3	4	Data and information – Branching databases	2	-To identify the attributes needed to collect data about an object	-I can arrange objects into a tree structure - I can create a group of objects within an existing group - I can select an attribute to separate objects into groups	Science	
3	4	Data and information – Branching databases	3	-To create a branching database	-I can group objects using my own yes/no questions - I can select objects to arrange in a branching database - I can test my branching database to see if it works	Science	
3	4	Data and information – Branching databases	4	-To explain why it is helpful for a database to be well s truc tured	-I can compare two branching database structures - I can create yes/no questions using given attributes - I can explain that questions need to be ordered carefully to split objects into similarly sized groups	Science	
3	4	Data and information – Branching databases	5	-To plan the structure of a branching database	-I can create a physical version of a branching database - I can create questions that will enable objects to be uniquely identified - I can independently create questions to use in a branching database	Science	
3	4	Data and information – Branching databases	6	-To independently create an identification tool	-I can create a branching database that reflects my plan - I can suggest real-world uses for branching databases - I can work with a partner to test my identification tool	Science	
3	5	Creating media – Desktop publis hing	1	-To recognise how text and images convey inf ormation	-I can explain the difference between text and images - I can identify the advantages and disadvantages of using text and images - I can recognise that text and images can communicate messages clearly	English- non-narrative material	
3	5	Creating media – Desktop publis hing	2	-To recognise that text and layout can be edited	-I can change font style, size, and colours for a given purpose - I can edit text - I can explain that text can be changed to communicate more clearly	English- non-narrative material	
3	5	Creating media – Desktop publis hing	3	-To choose appropriate page settings	-I can create a template for a particular purpose - I can define the term 'page orientation' - I can recognise placeholders and say why they are important	English- non-narrative material	
3	5	Creating media – Desktop publis hing	4	-To add content to a desktop publishing publication	-I can choose the best locations for my content - I can make changes to content after I've added it - I can paste text and images to create a magazine cover	English- non-narrative material	- Managing online information
3	5	Creating media – Desktop publis hing	5	-To consider how different layouts can suit different purposes	-I can choose a suitable layout for a given purpose - I can identify different layouts - I can match a layout to a purpose	English- non-narrative material	
3	5	Creating media – Desktop publis hing	6	-To consider the benefits of desktop publishing	-I can compare work made on desktop publishing to work created by hand - I can identify the uses of desktop publishing in the real world - I can say why desktop publishing might be helpful	English- non-narrative material	
3	6	Programming B - Events and actions in programs	1	-To explain how a sprite moves in an existing project	-I can choose which keys to use for actions and explain my choices - I can explain the relationship between an event and an action - I can identify a way to improve a program		
3	6	Programming B - Events and actions in programs	2	-To create a program to move a sprite in four directions	-I can choose a character for my project - I can choose a suitable size for a character in a maze - I can program movement		
3	6	Programming B - Events and actions in programs	3	-To adapt a program to a new context	-I can choose blocks to set up my program - I can consider the real world when making design choices - I can use a programming extension		
3	6	Programming B - Events and actions in programs	4	-To develop my program by adding features	-I can build more sequences of commands to make my design work - I can choose suitable keys to turn on additional features - I can identify additional features (from a given set of blocks)		
3	6	Programming B - Events and actions in programs	5	-To identify and fix bugs in a program	-I can match a piece of code to an outcome - I can modify a program using a design - I can test a program against a given design		



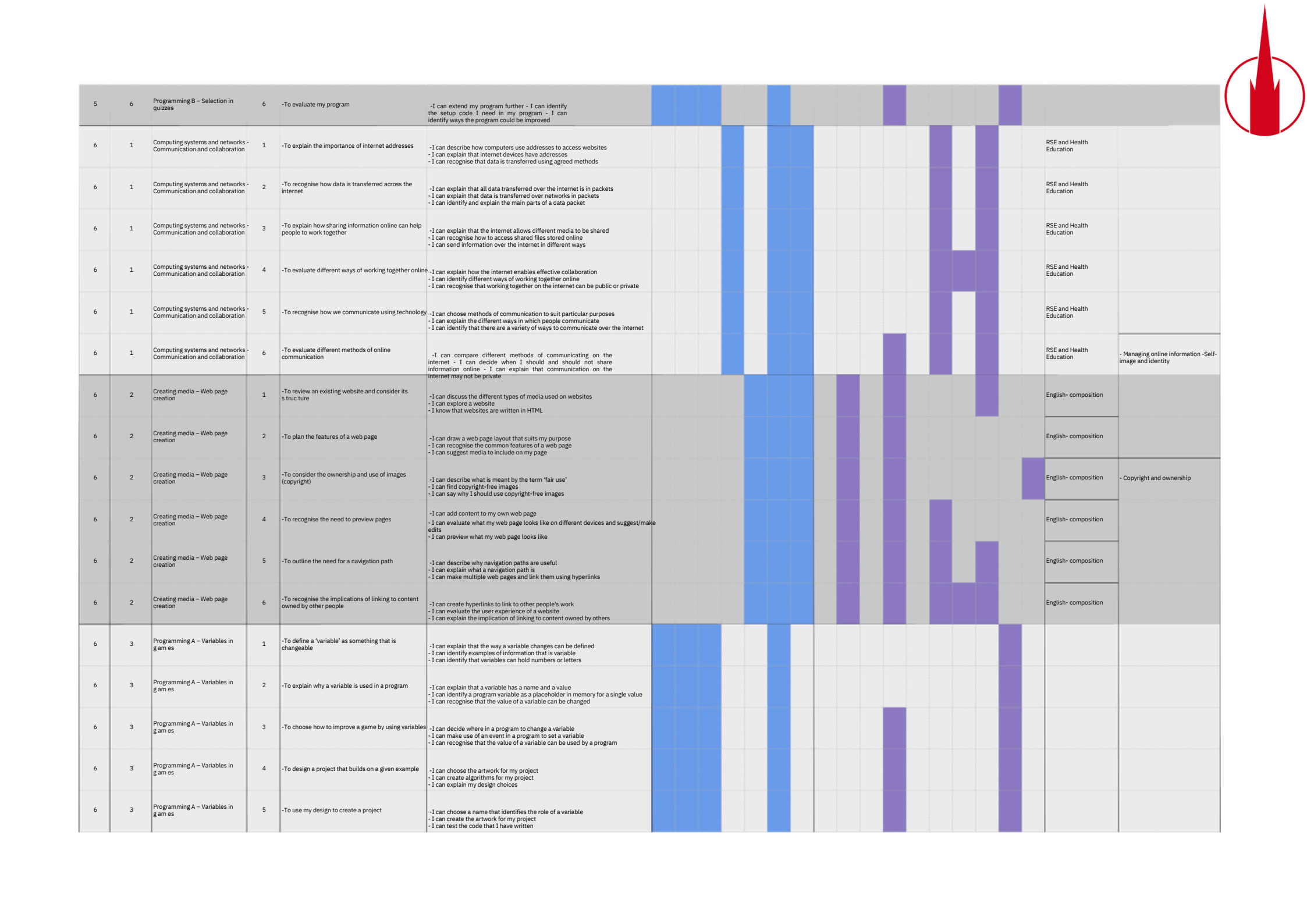
3	6	Programming B - Events and actions in programs	6	-To design and create a maze-based challenge	-I can evaluate my project - I can implement my design - I can make design choices and justify them		
4	1	Computing systems and networks – The Internet	1	-To describe how networks physically connect to other networks	-I can demonstrate how information is shared across the internet - I can describe the internet as a network of networks - I can discuss why a network needs protecting	RSE and Health Education	
4	1	Computing systems and networks – The Internet	2	-To recognise how networked devices make up the internet	-I can describe networked devices and how they connect - I can explain that the internet is used to provide many services - I can recognise that the World Wide Web contains websites and web pages	RSE and Health Education	
4	1	Computing systems and networks – The Internet	3	-To outline how websites can be shared via the World Wide Web (WWW)	-I can describe how to access websites on the WWW - I can describe where websites are stored when uploaded to the WWW - I can explain the types of media that can be shared on the WWW	RSE and Health Education	
4	1	Computing systems and networks – The Internet	4	-To describe how content can be added and accessed on the World Wide Web (WWW)	-I can explain that internet services can be used to create content online - I can explain what media can be found on websites - I can recognise that I can add content to the WWW	RSE and Health Education	
4	1	Computing systems and networks – The Internet	5	-To recognise how the content of the WWW is created by people	-I can explain that there are rules to protect content - I can explain that websites and their content are created by people - I can suggest who owns the content on websites	RSE and Health Education	
4	1	Computing systems and networks – The Internet	6	-To evaluate the consequences of unreliable content	-I can explain that not everything on the World Wide Web is true - I can explain why I need to think carefully before I share or reshare content - I can explain why some information I find online may not be honest, accurate, or l eg al	RSE and Health Education	- Managing online information
4	2	Creating media - Audio production	1	-To identify that sound can be recorded	-I can explain that the person who records the sound can say who is allowed to use it - I can identify the input and output devices used to record and play sound - I can use a computer to record audio		- Copyright and ownership
4	2	Creating media - Audio production	2	-To explain that audio recordings can be edited	-I can discuss what sounds can be added to a podcast - I can inspect the soundwave view to know where to trim my recording - I can re-record my voice to improve my recording	Science- sound	
4	2	Creating media - Audio production	3	-To recognise the different parts of creating a podcast project	-I can explain how sounds can be combined to make a podcast more engaging - I can plan appropriate content for a podcast - I can save my project so the different parts remain editable	English- non-narrative material	
4	2	Creating media - Audio production	4	-To apply audio editing skills independently	-I can improve my voice recordings - I can record content following my plan - I can review the quality of my recordings	English- non-narrative material	
4	2	Creating media - Audio production	5	-To combine audio to enhance my podcast project	-I can arrange multiple sounds to create the effect I want - I can explain the difference between saving a project and exporting an audio file - I can open my project to continue working on it	English- non-narrative material	
4	2	Creating media - Audio production	6	-To evaluate the effective use of audio	-I can choose appropriate edits to improve my podcast - I can listen to an audio recording to identify its strengths - I can suggest improvements to an audio recording	English- non-narrative material	
4	3	Programming A – Repetition in shapes	1	-To identify that accuracy in programming is important	-I can create a code snippet for a given purpose - I can explain the effect of changing a value of a command - I can program a computer by typing commands		
4	3	Programming A – Repetition in shapes	2	-To create a program in a text-based language	-I can test my algorithm in a text-based language - I can use a template to create a design for my program - I can write an algorithm to produce a given outcome		
4	3	Programming A – Repetition in shapes	3	-To explain what 'repeat' means	-I can identify everyday tasks that include repetition as part of a sequence, eg brushing teeth, dance moves - I can identify patterns in a sequence - I can use a count-controlled loop to produce a given outcome		
4	3	Programming A – Repetition in shapes	4	-To modify a count-controlled loop to produce a given outcome	-I can choose which values to change in a loop - I can identify the effect of changing the number of times a task is repeated - I can predict the outcome of a program containing a count-controlled loop		
4	3	Programming A – Repetition in shapes	5	-To decompose a task into small steps	-I can explain that a computer can repeatedly call a procedure - I can identify 'chunks' of actions in the real world - I can use a procedure in a program		

4	3	Programming A – Repetition in shapes	6	-To create a program that uses count-controlled loops to produce a given outcome	-I can design a program that includes count-controlled loops - I can develop my program by debugging it - I can make use of my design to write a program			
4	4	Data and information – Data logging	1	-To explain that data gathered over time can be used to answer questions	-I can choose a data set to answer a given question - I can identify data that can be gathered over time - I can suggest questions that can be answered using a given data set		Science (LKS2), Maths-data	
4	4	Data and information – Data logging	2	-To use a digital device to collect data automatically	-I can explain what data can be collected using sensors - I can identify that data from sensors can be recorded - I can use data from a sensor to answer a given question		Science (LKS2), Maths-data	
4	4	Data and information – Data logging	3	-To explain that a data logger collects 'data points' from sensors over time	-I can identify the intervals used to collect data - I can recognise that a data logger collects data at given points - I can talk about the data that I have captured		Science (LKS2), Maths-data	
4	4	Data and information – Data logging	4	-To recognise how a computer can help us analyse data	-I can explain that there are different ways to view data - I can sort data to find information - I can view data at different levels of detail		Science (LKS2), Maths-data	
4	4	Data and information – Data logging	5	-To identify the data needed to answer questions	-I can plan how to collect data using a data logger - I can propose a question that can be answered using logged data - I can use a data logger to collect data		Science (LKS2), Maths-data	
4	4	Data and information – Data logging	6	-To use data from sensors to answer questions	-I can draw conclusions from the data that I have collected - I can explain the benefits of using a data logger - I can interpret data that has been collected using a data logger		Science (LKS2), Maths-data	
4	5	Creating media – Photo editing	1	-To explain that the composition of digital images can be changed	-I can explain why I might crop an image - I can improve an image by rotating it - I can use photo editing software to crop an image			
4	5	Creating media – Photo editing	2	-To explain that colours can be changed in digital images	-I can experiment with different colour effects - I can explain that different colour effects make you think and feel different things - I can explain why I chose certain colour effects			
4	5	Creating media – Photo editing	3	-To explain how cloning can be used in photo editing	-I can add to the composition of an image by cloning - I can identify how a photo edit can be improved - I can remove parts of an image using cloning			
4	5	Creating media – Photo editing	4	-To explain that images can be combined	-I can experiment with tools to select and copy part of an image - I can explain why photos might be edited - I can use a range of tools to copy between images			- Self-image and identity
4	5	Creating media – Photo editing	5	-To combine images for a purpose	-I can choose suitable images for my project - I can create a project that is a combination of other images - I can describe the image I want to create			
4	5	Creating media – Photo editing	6	-To evaluate how changes can improve an image	-I can combine text and my image to complete the project - I can review images against a given criteria - I can use feedback to guide making changes			
4	6	Programming B – Repetition in g am es	1	-To develop the use of count-controlled loops in a different programming environment	-I can list an everyday task as a set of instructions including repetition - I can modify a snippet of code to create a given outcome - I can predict the outcome of a snippet of code			
4	6	Programming B – Repetition in g am es	2	-To explain that in programming there are infinite loops and count controlled loops	-I can choose when to use a count-controlled and an infinite loop - I can modify loops to produce a given outcome - I can recognise that some programming languages enable more than one process to be run at once			
4	6	Programming B – Repetition in g am es	3	-To develop a design that includes two or more loops which run at the same time	-I can choose which action will be repeated for each object - I can evaluate the effectiveness of the repeated sequences used in my program - I can explain what the outcome of the repeated action should be			
4	6	Programming B – Repetition in g am es	4	-To modify an infinite loop in a given program	-I can explain the effect of my changes - I can identify which parts of a loop can be changed - I can re-use existing code snippets on new sprites			
4	6	Programming B – Repetition in g am es	5	-To design a project that includes repetition	-I can develop my own design explaining what my project will do - I can evaluate the use of repetition in a project - I can select key parts of a given project to use in my own design			

4	6	Programming B – Repetition in g am es	6	-To create a project that includes repetition	-I can build a program that follows my design - I can evaluate the steps I followed when building my project - I can refine the algorithm in my design			
5	1	Computing systems and networks - Systems and searching	1	-To explain that computers can be connected together to form systems	-I can describe that a computer system features inputs, processes, and outputs - I can explain that computer systems communicate with other devices - I can explain that systems are built using a number of parts	RSE and Health Education		
5	1	Computing systems and networks - Systems and searching	2	-To recognise the role of computer systems in our lives	-I can explain the benefits of a given computer system - I can identify tasks that are managed by computer systems - I can identify the human elements of a computer system	RSE and Health Education		Privacy and Security
5	1	Computing systems and networks - Systems and searching	3	-To experiment with search engines	-I can compare results from different search engines - I can make use of a web search to find specific information - I can refine my web search	RSE and Health Education		- Managing online information
5	1	Computing systems and networks - Systems and searching	4	-To describe how search engines select results	-I can explain why we need tools to find things online - I can recognise the role of web crawlers in creating an index - I can relate a search term to the search engine's index	RSE and Health Education		- Managing online information
5	1	Computing systems and networks - Systems and searching	5	-To explain how search results are ranked	-I can explain that a search engine follows rules to rank results - I can give examples of criteria used by search engines to rank results - I can order a list by rank	RSE and Health Education		- Managing online information
5	1	Computing systems and networks - Systems and searching	6	-To recognise why the order of results is important, and to whom	-I can describe some of the ways that search results can be influenced - I can explain how search engines make money - I can recognise some of the limitations of search engines	RSE and Health Education		- Managing online information
5	2	Creating media - Video production	1	-To explain what makes a video effective	-I can compare features in different videos - I can explain that video is a visual media format - I can identify features of videos			Online Relationships
5	2	Creating media - Video production	2	-To identify digital devices that can record video	-I can experiment with different camera angles - I can identify and find features on a digital video recording device - I can make use of a microphone			
5	2	Creating media - Video production	3	-To capture video using a range of techniques	-I can capture video using a range of filming techniques - I can review how effective my video is - I can suggest filming techniques for a given purpose			
5	2	Creating media - Video production	4	-To create a storyboard	-I can create and save video content - I can decide which filming techniques I will use - I can outline the scenes of my video			
5	2	Creating media - Video production	5	-To identify that video can be improved through reshooting and editing	-I can explain how to improve a video by reshooting and editing - I can select the correct tools to make edits to my video - I can store, retrieve, and export my recording to a computer			
5	2	Creating media - Video production	6	-To consider the impact of the choices made when making and sharing a video	-I can evaluate my video and share my opinions - I can make edits to my video and improve the final outcome - I can recognise that my choices when making a video will impact on the quality of the final outcome			
5	3	Programming A – Selection in physical computing	1	-To control a simple circuit connected to a computer	-I can create a simple circuit and connect it to a microcontroller - I can explain what an infinite loop does - I can program a microcontroller to make an LED switch on	Science (LKS2)- electricity, & Technology	Design	
5	3	Programming A – Selection in physical computing	2	-To write a program that includes count-controlled l oop s	-I can connect more than one output component to a microcontroller - I can design sequences that use count-controlled loops - I can use a count-controlled loop to control outputs	Science (LKS2)- electricity, & Technology	Design	
5	3	Programming A – Selection in physical computing	3	-To explain that a loop can stop when a condition is met	-I can design a conditional loop - I can explain that a condition is either true or false - I can program a microcontroller to respond to an input	Science (LKS2)- electricity, & Technology	Design	
5	3	Programming A – Selection in physical computing	4	-To explain that a loop can be used to repeatedly check whether a condition has been met	-I can explain that a condition being met can start an action - I can identify a condition and an action in my project - I can use selection (an 'if...then...' statement) to direct the flow of a program	Science (LKS2)- electricity, & Technology	Design	
5	3	Programming A – Selection in physical computing	5	-To design a physical project that includes selection	-I can create a detailed drawing of my project - I can describe what my project will do - I can identify a real-world example of a condition starting an action	Science (LKS2)- electricity, & Technology	Design	

5	3	Programming A – Selection in physical computing	6	-To create a program that controls a physical computing project	-I can test and debug my project - I can use selection to produce an intended outcome - I can write an algorithm that describes what my model will do	Science (LKS2)- electricity, & Technology Design
5	4	Data and information – Flat-file databases	1	-To use a form to record information	-I can create a database using cards - I can explain how information can be recorded - I can order, sort, and group my data cards	Maths- Statistics
5	4	Data and information – Flat-file databases	2	-To compare paper and computer-based databases	-I can choose which field to sort data by to answer a given question - I can explain what a field and a record is in a database - I can navigate a flat-file database to compare different views of information	Maths- Statistics
5	4	Data and information – Flat-file databases	3	-To outline how you can answer questions by grouping and then sorting data	-I can combine grouping and sorting to answer specific questions - I can explain that data can be grouped using chosen values - I can group information using a database	Maths- Statistics
5	4	Data and information – Flat-file databases	4	-To explain that tools can be used to select specific data	-I can choose multiple criteria to answer a given question - I can choose which field and value are required to answer a given question - I can outline how 'AND' and 'OR' can be used to refine data selection	Maths- Statistics
5	4	Data and information – Flat-file databases	5	-To explain that computer programs can be used to compare data visually	-I can explain the benefits of using a computer to create charts - I can refine a chart by selecting a particular filter - I can select an appropriate chart to visually compare data	Maths- Statistics
5	4	Data and information – Flat-file databases	6	-To use a real-world database to answer questions	-I can ask questions that will need more than one field to answer - I can present my findings to a group - I can refine a search in a real-world context	Maths- Statistics
5	5	Creating media – Introduction to vector graphics	1	-To identify that drawing tools can be used to produce different outcomes	-I can discuss how vector drawings are different from paper-based drawings - I can experiment with the shape and line tools - I can recognise that vector drawings are made using shapes	Art and Design
5	5	Creating media – Introduction to vector graphics	2	-To create a vector drawing by combining shapes	-I can explain that each element added to a vector drawing is an object - I can identify the shapes used to make a vector drawing - I can move, resize, and rotate objects I have duplicated	Art and Design
5	5	Creating media – Introduction to vector graphics	3	-To use tools to achieve a desired effect	-I can explain how alignment grids and resize handles can be used to improve consistency - I can modify objects to create a new image - I can use the zoom tool to help me add detail to my drawings	Art and Design
5	5	Creating media – Introduction to vector graphics	4	-To recognise that vector drawings consist of layers	-I can change the order of layers in a vector drawing - I can identify that each added object creates a new layer in the drawing - I can use layering to create an image	Art and Design
5	5	Creating media – Introduction to vector graphics	5	-To group objects to make them easier to work with	-I can copy part of a drawing by duplicating several objects - I can recognise when I need to group and ungroup objects - I can reuse a group of objects to further develop my vector drawing	Art and Design
5	5	Creating media – Introduction to vector graphics	6	-To apply what I have learned about vector drawings	-I can compare vector drawings to freehand paint drawings - I can create a vector drawing for a specific purpose - I can reflect on the skills I have used and why I have used them	Art and Design
5	6	Programming B – Selection in quizzes	1	-To explain how selection is used in computer programs	-I can identify conditions in a program - I can modify a condition in a program - I can recall how conditions are used in selection	
5	6	Programming B – Selection in quizzes	2	-To relate that a conditional statement connects a condition to an outcome	-I can create a program with different outcomes using selection - I can identify the condition and outcomes in an 'if... then... else...' statement - I can use selection in an infinite loop to check a condition	
5	6	Programming B – Selection in quizzes	3	-To explain how selection directs the flow of a program	-I can design the flow of a program which contains 'if... then... else...' - I can explain that program flow can branch according to a condition - I can show that a condition can direct program flow in one of two ways	
5	6	Programming B – Selection in quizzes	4	-To design a program which uses selection	-I can identify the outcome of user input in an algorithm - I can outline a given task - I can use a design format to outline my project	
5	6	Programming B – Selection in quizzes	5	-To create a program which uses selection	-I can implement my algorithm to create the first section of my program - I can share my program with others - I can test my program	

5	6	Programming B – Selection in quizzes	6	-To evaluate my program	-I can extend my program further - I can identify the setup code I need in my program - I can identify ways the program could be improved		
6	1	Computing systems and networks - Communication and collaboration	1	-To explain the importance of internet addresses	-I can describe how computers use addresses to access websites - I can explain that internet devices have addresses - I can recognise that data is transferred using agreed methods	RSE and Health Education	
6	1	Computing systems and networks - Communication and collaboration	2	-To recognise how data is transferred across the internet	-I can explain that all data transferred over the internet is in packets - I can explain that data is transferred over networks in packets - I can identify and explain the main parts of a data packet	RSE and Health Education	
6	1	Computing systems and networks - Communication and collaboration	3	-To explain how sharing information online can help people to work together	-I can explain that the internet allows different media to be shared - I can recognise how to access shared files stored online - I can send information over the internet in different ways	RSE and Health Education	
6	1	Computing systems and networks - Communication and collaboration	4	-To evaluate different ways of working together online	-I can explain how the internet enables effective collaboration - I can identify different ways of working together online - I can recognise that working together on the internet can be public or private	RSE and Health Education	
6	1	Computing systems and networks - Communication and collaboration	5	-To recognise how we communicate using technology	-I can choose methods of communication to suit particular purposes - I can explain the different ways in which people communicate - I can identify that there are a variety of ways to communicate over the internet	RSE and Health Education	
6	1	Computing systems and networks - Communication and collaboration	6	-To evaluate different methods of online communication	-I can compare different methods of communicating on the internet - I can decide when I should and should not share information online - I can explain that communication on the internet may not be private	RSE and Health Education	- Managing online information -Self-image and identity
6	2	Creating media – Web page creation	1	-To review an existing website and consider its s truc ture	-I can discuss the different types of media used on websites - I can explore a website - I know that websites are written in HTML	English- composition	
6	2	Creating media – Web page creation	2	-To plan the features of a web page	-I can draw a web page layout that suits my purpose - I can recognise the common features of a web page - I can suggest media to include on my page	English- composition	
6	2	Creating media – Web page creation	3	-To consider the ownership and use of images (copyright)	-I can describe what is meant by the term 'fair use' - I can find copyright-free images - I can say why I should use copyright-free images	English- composition	- Copyright and ownership
6	2	Creating media – Web page creation	4	-To recognise the need to preview pages	-I can add content to my own web page - I can evaluate what my web page looks like on different devices and suggest/make edits - I can preview what my web page looks like	English- composition	
6	2	Creating media – Web page creation	5	-To outline the need for a navigation path	-I can describe why navigation paths are useful - I can explain what a navigation path is - I can make multiple web pages and link them using hyperlinks	English- composition	
6	2	Creating media – Web page creation	6	-To recognise the implications of linking to content owned by other people	-I can create hyperlinks to link to other people's work - I can evaluate the user experience of a website - I can explain the implication of linking to content owned by others	English- composition	
6	3	Programming A – Variables in g am es	1	-To define a 'variable' as something that is changeable	-I can explain that the way a variable changes can be defined - I can identify examples of information that is variable - I can identify that variables can hold numbers or letters		
6	3	Programming A – Variables in g am es	2	-To explain why a variable is used in a program	-I can explain that a variable has a name and a value - I can identify a program variable as a placeholder in memory for a single value - I can recognise that the value of a variable can be changed		
6	3	Programming A – Variables in g am es	3	-To choose how to improve a game by using variables	-I can decide where in a program to change a variable - I can make use of an event in a program to set a variable - I can recognise that the value of a variable can be used by a program		
6	3	Programming A – Variables in g am es	4	-To design a project that builds on a given example	-I can choose the artwork for my project - I can create algorithms for my project - I can explain my design choices		
6	3	Programming A – Variables in g am es	5	-To use my design to create a project	-I can choose a name that identifies the role of a variable - I can create the artwork for my project - I can test the code that I have written		



6	3	Programming A – Variables in g am es	6	-To evaluate my project	-I can identify ways that my game could be improved - I can share my game with others - I can use variables to extend my game	
6	4	Data and information – Spreadsheets	1	-To create a data set in a spreadsheet	-I can collect data - I can enter data into a spreadsheet - I can suggest how to structure my data	Maths- number, statistics
6	4	Data and information – Spreadsheets	2	-To build a data set in a spreadsheet	-I can apply an appropriate format to a cell - I can choose an appropriate format for a cell - I can explain what an item of data is	Maths- number, statistics
6	4	Data and information – Spreadsheets	3	-To explain that formulas can be used to produce calculated data	-I can construct a formula in a spreadsheet - I can explain which data types can be used in calculations - I can identify that changing inputs changes outputs	Maths- number, statistics
6	4	Data and information – Spreadsheets	4	-To apply formulas to data	-I can apply a formula to multiple cells by duplicating it - I can calculate data using different operations - I can create a formula which includes a range of cells	Maths- number, statistics
6	4	Data and information – Spreadsheets	5	-To create a spreadsheet to plan an event	-I can apply a formula to calculate the data I need to answer questions - I can explain why data should be organised - I can use a spreadsheet to answer questions	Maths- number, statistics
6	4	Data and information – Spreadsheets	6	-To choose suitable ways to present data	-I can produce a chart - I can suggest when to use a table or chart - I can use a chart to show the answer to questions	Maths- number, statistics
6	5	Creating media – 3D Modelling	1	-To recognise that you can work in three dimensions on a computer	-I can add 3D shapes to a project - I can move 3D shapes relative to one another - I can view 3D shapes from different perspectives	Art and design Design & technology Maths- 3D shapes
6	5	Creating media – 3D Modelling	2	-To identify that digital 3D objects can be modified	-I can lift/lower 3D objects - I can recolour a 3D object - I can resize an object in three dimensions	Art and design Design & technology Maths- 3D shapes
6	5	Creating media – 3D Modelling	3	-To recognise that objects can be combined in a 3D m od el	-I can duplicate 3D objects - I can group 3D objects - I can rotate objects in three dimensions	Art and design Design & technology Maths- 3D shapes
6	5	Creating media – 3D Modelling	4	-To create a 3D model for a given purpose	-I can accurately size 3D objects - I can combine a number of 3D objects - I can show that placeholders can create holes in 3D objects	Art and design Design & technology Maths- 3D shapes
6	5	Creating media – 3D Modelling	5	-To plan my own 3D model	-I can analyse a 3D model - I can choose objects to use in a 3D model - I can combine objects in a design	Art and design Design & technology Maths- 3D shapes
6	5	Creating media – 3D Modelling	6	-To create my own digital 3D model	-I can construct a 3D model based on a design - I can explain how my 3D model could be improved - I can modify my 3D model to improve it	Art and design Design & technology Maths- 3D shapes
6	6	Programming B - Sensing m ovem en t	1	-To create a program to run on a controllable device	-I can apply my knowledge of programming to a new environment - I can test my program on an emulator - I can transfer my program to a controllable device	
6	6	Programming B - Sensing m ovem en t	2	-To explain that selection can control the flow of a program	-I can determine the flow of a program using selection - I can identify examples of conditions in the real world - I can use a variable in an if, then, else statement to select the flow of a program	
6	6	Programming B - Sensing m ovem en t	3	-To update a variable with a user input	-I can experiment with different physical inputs - I can explain that checking a variable doesn't change its value - I can use a condition to change a variable	
6	6	Programming B - Sensing m ovem en t	4	-To use a conditional statement to compare a variable to a value	-I can explain the importance of the order of conditions in else, if statements - I can modify a program to achieve a different outcome - I can use an operand (e.g. <>=) in an if, then statement	
6	6	Programming B - Sensing m ovem en t	5	-To design a project that uses inputs and outputs on a controllable device	-I can decide what variables to include in a project - I can design the algorithm for my project - I can design the program flow for my project	

6	6	Programming B - Sensing m ovem en t	6	-To develop a program to use inputs and outputs on a controllable device	-I can create a program based on my design - I can test my program against my design - I can use a range of approaches to find and fix bugs	