Year Group	Suggested Order	Unit Name	Lesson	Learning Objectives	National Curriculum Links									Teach Computing Taxonomy										Education for a Connected World
					3	3	3	3	4	4	4	4	4	AL	CM	CS	DD	DI	ET	IT	NW	PG	SS	
7	1	Impact of technology – Collaborating online respectfully	1	- Create a memorable and secure password for an account on the school network																				- Online bullying - Online relationships - Privacy and security
7	1	Impact of technology – Collaborating online respectfully	1	- Remember the rules of the computing lab																				- Online bullying - Online relationships - Privacy and security
7	1	Impact of technology – Collaborating online respectfully	2	- Find personal documents and common applications																				- Online bullying - Online relationships - Privacy and security
7	1	Impact of technology – Collaborating online respectfully	2	- Recognise a respectful email																				- Online bullying - Online relationships - Privacy and security
7	1	Impact of technology – Collaborating online respectfully	2	- Construct an effective email and send it to the correct recipients																				- Online bullying - Online relationships - Privacy and security
7	1	Impact of technology – Collaborating online respectfully	3	- Describe how to communicate with peers online																				- Online bullying - Online relationships - Privacy and security
7	1	Impact of technology – Collaborating online respectfully	4	- Plan effective presentations for a given audience																				- Online bullying - Online relationships - Privacy and security
7	1	Impact of technology – Collaborating online respectfully	4	- Describe cyberbullying																				- Online bullying - Online relationships - Privacy and security
7	1	Impact of technology – Collaborating online respectfully	4	- Explain the effects of cyberbullying																				- Online bullying - Online relationships - Privacy and security
7	1	Impact of technology – Collaborating online respectfully	5	- Plan effective presentations for a given audience																				- Online bullying - Online relationships - Privacy and security
7	1	Impact of technology – Collaborating online respectfully	5	- Describe cyberbullying																				- Online bullying - Online relationships - Privacy and security
7	1	Impact of technology – Collaborating online respectfully	5	- Explain the effects of cyberbullying																				- Online bullying - Online relationships - Privacy and security
7	1	Impact of technology – Collaborating online respectfully	6	- Check who you are talking to online																				- Online bullying - Online relationships - Privacy and security
7	6	Modelling data – Spreadsheets	1	- Identify columns, rows, cells, and cell references in spreadsheet software																				
7	6	Modelling data – Spreadsheets	1	- Use formatting techniques in a spreadsheet																				
7	6	Modelling data – Spreadsheets	2	- Use basic formulas with cell references to perform calculations in a spreadsheet (+, -, *, /)																				
7	6	Modelling data – Spreadsheets	2	- Use the autofill tool to replicate cell data																				
7	6	Modelling data – Spreadsheets	3	- Explain the difference between data and information																				
7	6	Modelling data – Spreadsheets	3	- Explain the difference between primary and secondary sources of data																				
7	6	Modelling data – Spreadsheets	3	- Collect data																				
7	6	Modelling data – Spreadsheets	4	- Analyse data																				
7	6	Modelling data – Spreadsheets	4	- Create appropriate charts in a spreadsheet																				
7	6	Modelling data – Spreadsheets	4	- Use the functions SUM, COUNTA, MAX, and MIN in a spreadsheet																				
7	6	Modelling data – Spreadsheets	5	- Analyse data																				
7	6	Modelling data – Spreadsheets	5	- Use a spreadsheet to sort and filter data																				
7	6	Modelling data – Spreadsheets	5	- Use the functions AVERAGE, COUNTIF, and IF in a spreadsheet																				
7	6	Modelling data – Spreadsheets	6	- Use conditional formatting in a spreadsheet																				
7	6	Modelling data – Spreadsheets	6	- Apply all of the spreadsheet skills covered in this unit																				
7	2	Networks from semaphores to the Internet	1	- Define what a computer network is and explain how data is transmitted between computers across networks																				- Privacy and security
7	2	Networks from semaphores to the Internet	1	- Define 'protocol' and provide examples of non-networking protocols																				- Privacy and security
7	2	Networks from semaphores to the Internet	2	- List examples of the hardware necessary for connecting devices to networks																				- Privacy and security
7	2	Networks from semaphores to the Internet	3	- Compare wired to wireless connections and list examples of specific technologies currently used to implement such connections																				- Privacy and security
7	2	Networks from semaphores to the Internet	3	- Define 'bandwidth', using the appropriate units for measuring the rate at which data is transmitted, and discuss familiar examples where bandwidth is important																				- Privacy and security
7	2	Networks from semaphores to the Internet	4	- Define what the internet is																				- Privacy and security
7	2	Networks from semaphores to the Internet	4	- Explain how data travels between computers across the internet																				- Privacy and security
7	2	Networks from semaphores to the Internet	4	- Describe key words such as 'protocols', 'packets', and 'addressing'																				- Privacy and security
7	2	Networks from semaphores to the Internet	5	- Explain the difference between the internet, its services, and the World Wide Web																				- Privacy and security
7	2	Networks from semaphores to the Internet	5	- Describe how services are provided over the internet																				- Privacy and security
7	2	Networks from semaphores to the Internet	5	- List some of these services and the context in which they are used																				- Privacy and security
7	2	Networks from semaphores to the Internet	5	- Explain the term 'connectivity' as the capacity for connected devices ('Internet of Things') to collect and share information about me with or without my knowledge (including microphones, cameras, and geolocation)																				- Privacy and security
7	2	Networks from semaphores to the Internet	5	- Describe how internet-connected devices can affect me																				- Privacy and security
7	2	Networks from semaphores to the Internet	6	- Describe components (servers, browsers, pages, HTTP and HTTPS protocols, etc.) and how they work together																				- Privacy and security
7	4	Programming essentials in Scratch – part I	1	- Compare how humans and computers understand instructions (understand and carry out)																				
7	4	Programming essentials in Scratch – part I	1	- Define a sequence as instructions performed in order, with each executed in turn																				

7	4	Programming essentials in Scratch – part I	1	- Predict the outcome of a simple sequence																			
7	4	Programming essentials in Scratch – part I	1	- Modify a sequence																			
7	4	Programming essentials in Scratch – part I	2	- Define a variable as a name that refers to data being stored by the computer																			
7	4	Programming essentials in Scratch – part I	2	- Recognise that computers follow the control flow of input/process/output																			
7	4	Programming essentials in Scratch – part I	2	- Predict the outcome of a simple sequence that includes variables																			
7	4	Programming essentials in Scratch – part I	2	- Trace the values of variables within a sequence																			
7	4	Programming essentials in Scratch – part I	2	- Make a sequence that includes a variable																			
7	4	Programming essentials in Scratch – part I	3	- Define a condition as an expression that will be evaluated as either true or																			
7	4	Programming essentials in Scratch – part I	3	- Identify that selection uses conditions to control the flow of a sequence																			
7	4	Programming essentials in Scratch – part I	3	- Identify where selection statements can be used in a program																			
7	4	Programming essentials in Scratch – part I	3	- Modify a program to include selection																			
7	4	Programming essentials in Scratch – part I	4	- Create conditions that use comparison operators (>,<,=)																			
7	4	Programming essentials in Scratch – part I	4	- Create conditions that use logic operators (and/or/not)																			
7	4	Programming essentials in Scratch – part I	4	- Identify where selection statements can be used in a program that include comparison and logical operators																			
7	4	Programming essentials in Scratch – part I	5	- Define iteration as a group of instructions that are repeatedly executed																			
7	4	Programming essentials in Scratch – part I	5	- Describe the need for iteration																			
7	4	Programming essentials in Scratch – part I	5	- Identify where count-controlled iteration can be used in a program																			
7	4	Programming essentials in Scratch – part I	5	- Implement count-controlled iteration in a program																			
7	4	Programming essentials in Scratch – part I	5	- Detect and correct errors in a program (debugging)																			
7	4	Programming essentials in Scratch – part I	6	- Independently design and apply programming constructs to solve a problem (subroutine, selection, count-controlled iteration, operators, and variables)																			
7	5	Programming essentials in Scratch – part II	7	- Define a subroutine as a group of instructions that will run when called by the main program or other subroutines																			
7	5	Programming essentials in Scratch – part II	7	- Define decomposition as breaking a problem down into smaller, more manageable subproblems																			
7	5	Programming essentials in Scratch – part II	7	- Identify how subroutines can be used for decomposition																			
7	5	Programming essentials in Scratch – part II	8	- Identify where condition-controlled iteration can be used in a program																			
7	5	Programming essentials in Scratch – part II	8	- Implement condition-controlled iteration in a program																			
7	5	Programming essentials in Scratch – part II	9	- Evaluate which type of iteration is required in a program																			
7	5	Programming essentials in Scratch – part II	10	- Define a list as a collection of related elements that are referred to by a single name																			
7	5	Programming essentials in Scratch – part II	10	- Describe the need for lists																			
7	5	Programming essentials in Scratch – part II	10	- Identify when lists can be used in a program																			
7	5	Programming essentials in Scratch – part II	10	- Use a list																			
7	5	Programming essentials in Scratch – part II	11	- Decompose a larger problem into smaller subproblems																			
7	5	Programming essentials in Scratch – part II	11	- Apply appropriate constructs to solve a problem																			
7	5	Programming essentials in Scratch – part II	12	- Decompose a larger problem into smaller subproblems																			
7	5	Programming essentials in Scratch – part II	12	- Apply appropriate constructs to solve a problem																			
7	3	Using media – Gaining support for a cause	1	- Select the most appropriate software to use to complete a task																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	1	- Identify the key features of a word processor																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	1	- Apply the key features of a word processor to format a document																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	1	- Evaluate formatting techniques to understand why we format documents																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	2	- Select appropriate images for a given context																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	2	- Apply appropriate formatting techniques																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	2	- Demonstrate an understanding of licensing issues involving online content by applying appropriate Creative Commons licences																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	2	- Demonstrate the ability to credit the original source of an image																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	3	- Critique digital content for credibility																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	3	- Apply techniques in order to identify whether or not a source is credible																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	4	- Apply referencing techniques and understand the concept of plagiarism																			- Copyright and ownership - Managing online information

7	3	Using media – Gaining support for a cause	4	- Evaluate online sources for use in own work																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	5	- Construct a blog using appropriate software																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	5	- Organise the content of the blog based on credible sources																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	5	- Apply referencing techniques that credit authors appropriately																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	5	- Design the layout of the content to make it suitable for the audience																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	6	- Construct a blog using appropriate software																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	6	- Organise the content of blog based on credible sources																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	6	- Apply referencing techniques that credit authors appropriately																			- Copyright and ownership - Managing online information
7	3	Using media – Gaining support for a cause	6	- Design the layout of the content to make it suitable for the audience																			- Copyright and ownership - Managing online information
8	2	Computing systems	1	- Recall that a general-purpose computing system is a device for executing programs																			
8	2	Computing systems	1	- Recall that a program is a sequence of instructions that specify operations that are to be performed on data																			
8	2	Computing systems	1	- Explain the difference between a general-purpose computing system and a purpose-built device																			
8	2	Computing systems	2	- Describe the function of the hardware components used in computing systems																			
8	2	Computing systems	2	- Describe how the hardware components used in computing systems work together in order to execute programs																			
8	2	Computing systems	2	- Recall that all computing systems, regardless of form, have a similar structure ('architecture')																			
8	2	Computing systems	3	- Analyse how the hardware components used in computing systems work together in order to execute programs																			
8	2	Computing systems	3	- Define what an operating system is, and recall its role in controlling program execution																			
8	2	Computing systems	4	- Describe the NOT, AND, and OR logical operators, and how they are used to form logical expressions																			
8	2	Computing systems	4	- Use logic gates to construct logic circuits, and associate these with logical operators and expressions																			
8	2	Computing systems	4	- Describe how hardware is built out of increasingly complex logic circuits																			
8	2	Computing systems	4	- Recall that, since hardware is built out of logic circuits, data and instructions alike need to be represented using binary digits																			
8	2	Computing systems	5	- Provide broad definitions of 'artificial intelligence' and 'machine learning'																			
8	2	Computing systems	5	- Identify examples of artificial intelligence and machine learning in the real world																			
8	2	Computing systems	5	- Describe the steps involved in training machines to perform tasks (gathering data, training, testing)																			
8	2	Computing systems	5	- Describe how machine learning differs from traditional programming																			
8	2	Computing systems	5	- Associate the use of artificial intelligence with moral dilemmas																			
8	2	Computing systems	6	- Explain the implications of sharing program code																			
8	3	Developing for the web	1	- Describe what HTML is																			
8	3	Developing for the web	1	- Use HTML to structure static web pages																			
8	3	Developing for the web	1	- Modify HTML tags using inline styling to improve the appearance of web pages																			
8	3	Developing for the web	2	- Display images within a web page																			
8	3	Developing for the web	2	- Apply HTML tags to construct a web page structure from a provided design																			
8	3	Developing for the web	3	- Describe what CSS is																			
8	3	Developing for the web	3	- Use CSS to style static web pages																			
8	3	Developing for the web	3	- Assess the benefits of using CSS to style pages instead of in-line formatting																			
8	3	Developing for the web	4	- Describe what a search engine is																			
8	3	Developing for the web	4	- Explain how search engines 'crawl' through the World Wide Web and how they select and rank results																			
8	3	Developing for the web	4	- Analyse how search engines select and rank results when searches are made																			
8	3	Developing for the web	5	- Use search technologies effectively																			
8	3	Developing for the web	5	- Discuss the impact of search technologies and the issues that arise by the way they function and the way they are used																			
8	3	Developing for the web	5	- Create hyperlinks to allow users to navigate between multiple web pages																			
8	3	Developing for the web	6	- Implement navigation to complete a functioning website																			

8	3	Developing for the web	6	- Complete summative assessment																				
8	6	Introduction to Python programming	1	- Describe what algorithms and programs are and how they differ																				
8	6	Introduction to Python programming	1	- Recall that a program written in a programming language needs to be translated in order to be executed by a machine																				
8	6	Introduction to Python programming	1	- Write simple Python programs that display messages, assign values to variables, and receive keyboard input																				
8	6	Introduction to Python programming	1	- Locate and correct common syntax errors																				
8	6	Introduction to Python programming	2	- Describe the semantics of assignment statements																				
8	6	Introduction to Python programming	2	- Use simple arithmetic expressions in assignment statements to calculate values																				
8	6	Introduction to Python programming	2	- Receive input from the keyboard and convert it to a numerical value																				
8	6	Introduction to Python programming	3	- Use relational operators to form logical expressions																				
8	6	Introduction to Python programming	3	- Use binary selection (if, else statements) to control the flow of program execution																				
8	6	Introduction to Python programming	3	- Generate and use random integers																				
8	6	Introduction to Python programming	4	- Use multi-branch selection (if, elif, else statements) to control the flow of program execution																				
8	6	Introduction to Python programming	4	- Describe how iteration (while statements) controls the flow of program execution																				
8	6	Introduction to Python programming	5	- Use iteration (while loops) to control the flow of program execution																				
8	6	Introduction to Python programming	5	- Use variables as counters in iterative programs																				
8	6	Introduction to Python programming	6	- Combine iteration and selection to control the flow of program execution																				
8	6	Introduction to Python programming	6	- Use Boolean variables as flags																				
8	1	Media – Vector graphics	1	- Draw basic shapes (rectangle, ellipse, polygon, star) with different properties (fill and stroke, shape-specific attributes)																				
8	1	Media – Vector graphics	1	- Manipulate individual objects (select, move, resize, rotate, duplicate, flip, z-order)																				
8	1	Media – Vector graphics	2	- Manipulate groups of objects (select, group/ungroup, align, distribute)																				
8	1	Media – Vector graphics	2	- Combine paths by applying operations (union, difference, intersection)																				
8	1	Media – Vector graphics	3	- Convert objects to paths																				
8	1	Media – Vector graphics	3	- Draw paths																				
8	1	Media – Vector graphics	3	- Edit path nodes																				
8	1	Media – Vector graphics	4	- Combine multiple tools and techniques to create a vector graphic design																				
8	1	Media – Vector graphics	5	- Explain what vector graphics are																				
8	1	Media – Vector graphics	5	- Provide examples where using vector graphics would be appropriate																				
8	1	Media – Vector graphics	6	- Peer assess another pair's project work																				
8	1	Media – Vector graphics	6	- Improve your own project work based on feedback																				
8	1	Media – Vector graphics	6	- Complete a summative assessment																				
8	5	Mobile app development	1	- Identify when a problem needs to be broken down																				
8	5	Mobile app development	1	- Implement and customise GUI elements to meet the needs of the user																				
8	5	Mobile app development	2	- Recognise that events can control the flow of a program																				
8	5	Mobile app development	2	- Use user input in an event-driven programming environment																				
8	5	Mobile app development	2	- Use variables in an event-driven programming environment																				
8	5	Mobile app development	2	- Develop a partially complete application to include additional functionality																				
8	5	Mobile app development	3	- Identify and fix common coding errors																				
8	5	Mobile app development	3	- Pass the value of a variable into an object																				
8	5	Mobile app development	3	- Establish user needs when completing a creative project																				
8	5	Mobile app development	4	- Apply decomposition to break down a large problem into more manageable steps																				
8	5	Mobile app development	4	- Use user input in a block-based programming language																				
8	5	Mobile app development	4	- Use a block-based programming language to create a sequence																				
8	5	Mobile app development	4	- Use variables in a block-based programming language																				
8	5	Mobile app development	5	- Use a block-based programming language to include sequencing and selection																				
8	5	Mobile app development	5	- Use user input in a block-based programming language																				
8	5	Mobile app development	5	- Use variables in a block-based programming language																				
8	5	Mobile app development	5	- Reflect and react to user feedback																				
8	5	Mobile app development	6	- Use a block-based programming language to include sequencing and selection																				
8	5	Mobile app development	6	- Use user input in a block-based programming language																				
8	5	Mobile app development	6	- Use variables in a block-based programming language																				
8	5	Mobile app development	6	- Evaluate the success of the programming project																				
8	4	Representations – from clay to silicon	1	- List examples of representations																				
8	4	Representations – from clay to silicon	1	- Recall that representations are used to store, communicate, and process information																				

8	4	Representations – from clay to silicon	1	- Provide examples of how different representations are appropriate for different tasks																				
8	4	Representations – from clay to silicon	2	- Recall that characters can be represented as sequences of symbols and list examples of character coding schemes																				
8	4	Representations – from clay to silicon	2	- Measure the length of a representation as the number of symbols that it contains																				
8	4	Representations – from clay to silicon	2	- Provide examples of how symbols are carried on physical media																				
8	4	Representations – from clay to silicon	3	- Explain what binary digits (bits) are, in terms of familiar symbols such as digits or letters																				
8	4	Representations – from clay to silicon	3	- Measure the size or length of a sequence of bits as the number of binary digits that it contains																				
8	4	Representations – from clay to silicon	4	- Describe how natural numbers are represented as sequences of binary digits																				
8	4	Representations – from clay to silicon	4	- Convert a decimal number to binary and vice versa																				
8	4	Representations – from clay to silicon	5	- Convert between different units and multiples of representation size																				
8	4	Representations – from clay to silicon	5	- Provide examples of the different ways that binary digits are physically represented in digital devices																				
8	4	Representations – from clay to silicon	6	- Apply all of the skills covered in this unit																				
9	5	Cybersecurity	1	- Explain the difference between data and information																				- Managing online information - Privacy and security
9	5	Cybersecurity	1	- Critique online services in relation to data privacy																				- Managing online information - Privacy and security
9	5	Cybersecurity	1	- Identify what happens to data entered online																				- Managing online information - Privacy and security
9	5	Cybersecurity	1	- Explain the need for the Data Protection Act																				- Managing online information - Privacy and security
9	5	Cybersecurity	2	- Recognise how human errors pose security risks to data																				- Managing online information - Privacy and security
9	5	Cybersecurity	2	- Implement strategies to minimise the risk of data being compromised through human error																				- Managing online information - Privacy and security
9	5	Cybersecurity	3	- Define hacking in the context of cyber security																				- Managing online information - Privacy and security
9	5	Cybersecurity	3	- Explain how a DDoS attack can impact users of online services																				- Managing online information - Privacy and security
9	5	Cybersecurity	3	- Identify strategies to reduce the chance of a brute force attack being successful																				- Managing online information - Privacy and security
9	5	Cybersecurity	3	- Explain the need for the Computer Misuse Act																				- Managing online information - Privacy and security
9	5	Cybersecurity	4	- List the common malware threats																				- Managing online information - Privacy and security
9	5	Cybersecurity	4	- Examine how different types of malware causes problems for computer systems																				- Managing online information - Privacy and security
9	5	Cybersecurity	4	- Question how malicious bots can have an impact on societal issues																				- Managing online information - Privacy and security
9	5	Cybersecurity	5	- Compare security threats against probability and the potential impact to organisations																				- Managing online information - Privacy and security
9	5	Cybersecurity	5	- Explain how networks can be protected from common security threats																				- Managing online information - Privacy and security
9	5	Cybersecurity	6	- Identify the most effective methods to prevent cyberattacks																				- Managing online information - Privacy and security
9	3	Data science	1	- Define data science																				
9	3	Data science	1	- Explain how visualising data can help identify patterns and trends in order to help us gain insights																				
9	3	Data science	1	- Use an appropriate software tool to visualise data sets and look for patterns or trends																				
9	3	Data science	2	- Recognise examples of where large data sets are used in daily life																				
9	3	Data science	2	- Select criteria and use data set to investigate predictions																				
9	3	Data science	2	- Evaluate findings to support arguments for or against a prediction																				
9	3	Data science	3	- Define the terms 'correlation' and 'outliers' in relation to data trends																				
9	3	Data science	3	- Identify the steps of the investigative cycle																				
9	3	Data science	3	- Solve a problem by implementing steps of the investigative cycle on a data set																				
9	3	Data science	3	- Use findings to support a recommendation																				
9	3	Data science	4	- Identify the steps of the investigative cycle																				
9	3	Data science	4	- Identify the data needed to answer a question defined by the learner																				
9	3	Data science	4	- Create a data capture form																				
9	3	Data science	5	- Describe the need for data cleansing																				
9	3	Data science	5	- Apply data cleansing techniques to a data set																				
9	3	Data science	5	- Visualise a data set																				
9	3	Data science	6	- Visualise a data set																				
9	3	Data science	6	- Analyse visualisations to identify patterns, trends, and outliers																				
9	3	Data science	6	- Draw conclusions and report findings																				
9	2	Media – Animations	1	- Add, delete, and move objects																				
9	2	Media – Animations	1	- Scale and rotate objects																				

9	2	Media – Animations	1	- Use a material to add colour to objects																			
9	2	Media – Animations	2	- Add, move, and delete keyframes to make basic animations																			
9	2	Media – Animations	2	- Play, pause, and move through the animation using the timeline																			
9	2	Media – Animations	2	- Create useful names for objects																			
9	2	Media – Animations	2	- Join multiple objects together using parenting																			
9	2	Media – Animations	3	- Use edit mode and extrude																			
9	2	Media – Animations	3	- Use loop cut and face editing																			
9	2	Media – Animations	3	- Apply different colours to different parts of the same model																			
9	2	Media – Animations	4	- Use proportional editing																			
9	2	Media – Animations	4	- Use the knife tool																			
9	2	Media – Animations	4	- Use subdivision																			
9	2	Media – Animations	5	- Add and edit set lighting																			
9	2	Media – Animations	5	- Set up the camera																			
9	2	Media – Animations	5	- Compare different render modes																			
9	2	Media – Animations	6	- Create a 3–10 second animation																			
9	2	Media – Animations	6	- Render out the animation																			
9	6	Physical computing	1	- Describe what the micro:bit is																			
9	6	Physical computing	1	- List the micro:bit's input and output devices																			
9	6	Physical computing	1	- Use a development environment to write, execute, and debug a Python program for the micro:bit																			
9	6	Physical computing	2	- Write programs that use the micro:bit's built-in input and output devices																			
9	6	Physical computing	3	- Write programs that use GPIO pins to generate output and receive input																			
9	6	Physical computing	3	- Write programs that communicate with other devices by sending and receiving messages wirelessly																			
9	6	Physical computing	4	- Design a physical computing artifact purposefully, keeping in mind the problem at hand, the needs of the audience involved, and the available resources																			
9	6	Physical computing	4	- Decompose the functionality of a physical computing system into simpler features																			
9	6	Physical computing	5	- Implement a physical computing project, while following, revising, and refining the project plan																			
9	6	Physical computing	6	- Implement a physical computing project, while following, revising, and refining the project plan																			
9	1	Python programming with sequences of data	1	- Write programs that display messages, receive keyboard input, and use simple arithmetic expressions in assignment statements																			
9	1	Python programming with sequences of data	1	- Locate and correct common syntax errors																			
9	1	Python programming with sequences of data	1	- Create lists and access individual list items																			
9	1	Python programming with sequences of data	1	- Use selection (**if-elif-else* statements) to control the flow of program execution																			
9	1	Python programming with sequences of data	2	- Perform common operations on lists or individual items																			
9	1	Python programming with sequences of data	3	- Use iteration (while statements) to control the flow of program execution																			
9	1	Python programming with sequences of data	3	- Perform common operations on lists or individual items																			
9	1	Python programming with sequences of data	3	- Perform common operations on strings or individual characters																			
9	1	Python programming with sequences of data	4	- Use iteration (for statements) to iterate over list items																			
9	1	Python programming with sequences of data	4	- Perform common operations on lists or strings																			
9	1	Python programming with sequences of data	5	- Use iteration (for loops) to iterate over lists and strings																			
9	1	Python programming with sequences of data	5	- Use variables to keep track of counts and sums																			
9	1	Python programming with sequences of data	5	- Combine key programming language features to develop solutions to meaningful problems																			
9	1	Python programming with sequences of data	6	- Apply all of the skills covered in this unit																			
9	4	Representations – going audiovisual	1	- Describe how digital images are composed of individual elements																			
9	4	Representations – going audiovisual	1	- Recall that the colour of each picture element is represented using a sequence of binary digits																			
9	4	Representations – going audiovisual	1	- Define key terms such as 'pixels', 'resolution', and 'colour depth'																			
9	4	Representations – going audiovisual	1	- Describe how an image can be represented as a sequence of bits																			
9	4	Representations – going audiovisual	2	- Describe how colour can be represented as a mixture of red, green, and blue, with a sequence of bits representing each colour's intensity																			
9	4	Representations – going audiovisual	2	- Compute the representation size of a digital image, by multiplying resolution (number of pixels) with colour depth (number of bits used to represent the colour of individual pixels)																			
9	4	Representations – going audiovisual	2	- Describe the trade-off between representation size and perceived quality for digital images																			
9	4	Representations – going audiovisual	3	- Perform basic image editing tasks using appropriate software and combine them in order to solve more complex problems requiring image manipulation																			
9	4	Representations – going audiovisual	3	- Explain how the manipulation of digital images amounts to arithmetic operations on their digital representation																			

9	4	Representations – going audiovisual	3	- Describe and assess the creative benefits and ethical drawbacks of digital manipulation [Education for a Connected World](https://www.gov.uk/government/publications/education-for-a-connected-world)																			
9	4	Representations – going audiovisual	4	- Recall that sound is a wave																			
9	4	Representations – going audiovisual	4	- Explain the function of microphones and speakers as components that capture and generate sound																			
9	4	Representations – going audiovisual	4	- Define key terms such as 'sample', 'sampling frequency/rate', 'sample size'																			
9	4	Representations – going audiovisual	4	- Describe how sounds are represented as sequences of bits																			
9	4	Representations – going audiovisual	5	- Calculate representation size for a given digital sound, given its attributes																			
9	4	Representations – going audiovisual	5	- Explain how attributes such as sampling frequency and sample size affect characteristics such as representation size and perceived quality, and the trade-offs involved																			
9	4	Representations – going audiovisual	5	- Perform basic sound editing tasks using appropriate software and combine them in order to solve more complex problems requiring sound manipulation																			
9	4	Representations – going audiovisual	6	- Recall that bitmap images and pulse code sound are not the only binary representations of images and sound available																			
9	4	Representations – going audiovisual	6	- Define 'compression', and describe why it is necessary																			