

Year Group	Suggested Order	Unit Name	Lesson	Learning Objectives	Success Criteria	Cross Curricular Links	Education for a Connected World
5	1	Computing systems and networks – Sharing information	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		- Copyright and ownership
5	1	Computing systems and networks – Sharing information	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		- Copyright and ownership
5	1	Computing systems and networks – Sharing information	3	To recognise how information is transferred over the internet	- I can explain that data is transferred over networks in packets - I can explain that networked digital devices have unique addresses - I can recognise that data is transferred using agreed methods		- Copyright and ownership
5	1	Computing systems and networks – Sharing information	4	To explain how sharing information online lets people in different places work together	- I can explain that the internet allows different media to be shared - I can recognise that connected digital devices can allow us to access shared files stored online - I can send information over the internet in different ways		- Copyright and ownership
5	1	Computing systems and networks – Sharing information	5	To contribute to a shared project online	- I can compare working online with working offline - I can make thoughtful suggestions on my group's work - I can suggest strategies to ensure successful group work		- Copyright and ownership
5	1	Computing systems and networks – Sharing information	6	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		- Copyright and ownership
5	2	Creating media – Video editing	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		
5	2	Creating media – Video editing	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 editing	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 editing	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 editing	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 editing	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		- Copyright and ownership
5	3	Programming A – Selection in physical computing	2	To write a program that includes count-controlled loops	- 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		- Copyright and ownership
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 - I can program a microcontroller to respond to an input		- Copyright and ownership
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		- Copyright and ownership

5	3	Programming A – Selection in physical computing	5	To design a physical project that includes selection	<ul style="list-style-type: none"> <li>- I can create a detailed drawing of my project</li> <li>- I can describe what my project will do</li> <li>- I can identify a real-world example of a condition starting an action</li> </ul>		- Copyright and ownership
5	3	Programming A – Selection in physical computing	6	To create a program that controls a physical computing project	<ul style="list-style-type: none"> <li>- I can test and debug my project</li> <li>- I can use selection to produce an intended outcome</li> <li>- I can write an algorithm that describes what my model will do</li> </ul>		- Copyright and ownership
5	4	Data and information – Flat-file databases	1	To use a form to record information	<ul style="list-style-type: none"> <li>- I can create multiple questions about the same field</li> <li>- I can explain how information can be recorded</li> <li>- I can order, sort, and group my data cards</li> </ul>		
5	4	Data and information – Flat-file databases	2	To compare paper and computer-based databases	<ul style="list-style-type: none"> <li>- I can choose which field to sort data by to answer a given question</li> <li>- I can explain what a 'field' and a 'record' is in a database</li> <li>- I can navigate a flat-file database to compare different views of information</li> </ul>		
5	4	Data and information – Flat-file databases	3	To outline how grouping and then sorting data allows us to answer questions	<ul style="list-style-type: none"> <li>- I can combine grouping and sorting to answer more specific questions</li> <li>- I can explain how information can be grouped</li> <li>- I can group information to answer questions</li> </ul>		
5	4	Data and information – Flat-file databases	4	To explain that tools can be used to select specific data	<ul style="list-style-type: none"> <li>- I can choose multiple criteria to answer a given question</li> <li>- I can choose which field and value are required to answer a given question</li> <li>- I can outline how 'AND' and 'OR' can be used to refine data selection</li> </ul>		
5	4	Data and information – Flat-file databases	5	To explain that computer programs can be used to compare data visually	<ul style="list-style-type: none"> <li>- I can explain the benefits of using a computer to create graphs</li> <li>- I can refine a chart by selecting a particular filter</li> <li>- I can select an appropriate chart to visually compare data</li> </ul>		
5	4	Data and information – Flat-file databases	6	To apply my knowledge of a database to ask and answer real-world questions	<ul style="list-style-type: none"> <li>- I can ask questions that will need more than one field to answer</li> <li>- I can present my findings to a group</li> <li>- I can refine a search in a real-world context</li> </ul>		
5	5	Creating media – Vector drawing	1	To identify that drawing tools can be used to produce different outcomes	<ul style="list-style-type: none"> <li>- I can discuss how a vector drawing is different from paper-based drawings</li> <li>- I can identify the main drawing tools</li> <li>- I can recognise that vector drawings are made using shapes</li> </ul>		<ul style="list-style-type: none"> <li>- Managing online information</li> <li>- Online relationships</li> <li>- Online reputation</li> <li>- Self-image and identity</li> </ul>
5	5	Creating media – Vector drawing	2	To create a vector drawing by combining shapes	<ul style="list-style-type: none"> <li>- I can explain that each element added to a vector drawing is an object</li> <li>- I can identify the shapes used to make a vector drawing</li> <li>- I can move, resize, and rotate objects I have duplicated</li> </ul>		<ul style="list-style-type: none"> <li>- Managing online information</li> <li>- Online relationships</li> <li>- Online reputation</li> <li>- Self-image and identity</li> </ul>
5	5	Creating media – Vector drawing	3	To use tools to achieve a desired effect	<ul style="list-style-type: none"> <li>- I can explain how alignment grids and resize handles can be used to improve consistency</li> <li>- I can modify objects to create different effects</li> <li>- I can use the zoom tool to help me add detail to my drawings</li> </ul>		<ul style="list-style-type: none"> <li>- Managing online information</li> <li>- Online relationships</li> <li>- Online reputation</li> <li>- Self-image and identity</li> </ul>
5	5	Creating media – Vector drawing	4	To recognise that vector drawings consist of layers	<ul style="list-style-type: none"> <li>- I can change the order of layers in a vector drawing</li> <li>- I can identify that each added object creates a new layer in the drawing</li> <li>- I can identify which objects are in the front layer or in the back layer of a drawing</li> </ul>		<ul style="list-style-type: none"> <li>- Managing online information</li> <li>- Online relationships</li> <li>- Online reputation</li> <li>- Self-image and identity</li> </ul>
5	5	Creating media – Vector drawing	5	To group objects to make them easier to work with	<ul style="list-style-type: none"> <li>- I can copy part of a drawing by duplicating several objects</li> <li>- I can group to create a single object</li> <li>- I can reuse a group of objects to further develop my vector drawing</li> </ul>		<ul style="list-style-type: none"> <li>- Managing online information</li> <li>- Online relationships</li> <li>- Online reputation</li> <li>- Self-image and identity</li> </ul>
5	5	Creating media – Vector drawing	6	To evaluate my vector drawing	<ul style="list-style-type: none"> <li>- I can apply what I have learned about vector drawings</li> <li>- I can suggest improvements to a vector drawing</li> <li>- I create alternatives to vector drawings</li> </ul>		<ul style="list-style-type: none"> <li>- Managing online information</li> <li>- Online relationships</li> <li>- Online reputation</li> <li>- Self-image and identity</li> </ul>
5	6	Programming B – Selection in quizzes	1	To explain how selection is used in computer programs	<ul style="list-style-type: none"> <li>- I can identify conditions in a program</li> <li>- I can modify a condition in a program</li> <li>- I can recall how conditions are used in selection</li> </ul>		
5	6	Programming B – Selection in quizzes	2	To relate that a conditional statement connects a condition to an outcome	<ul style="list-style-type: none"> <li>- I can create a program with different outcomes using selection</li> <li>- I can identify the condition and outcomes in an 'if... then... else...' statement</li> <li>- I can use selection in an infinite loop to check a condition</li> </ul>		
5	6	Programming B – Selection in quizzes	3	To explain how selection directs the flow of a program	<ul style="list-style-type: none"> <li>- I can design the flow of a program which contains 'if... then... else...'</li> <li>- I can explain that program flow can branch according to a condition</li> <li>- I can show that a condition can direct program flow in one of two ways</li> </ul>		

5	6	Programming B – Selection in quizzes	4	To design a program which uses selection	<ul style="list-style-type: none"> <li>- I can identify the outcome of user input in an algorithm</li> <li>- I can outline a given task</li> <li>- I can use a design format to outline my project</li> </ul>		
5	6	Programming B – Selection in quizzes	5	To create a program which uses selection	<ul style="list-style-type: none"> <li>- I can implement my algorithm to create the first section of my program</li> <li>- I can share my program with others</li> <li>- I can test my program</li> </ul>		
5	6	Programming B – Selection in quizzes	6	To evaluate my program	<ul style="list-style-type: none"> <li>- I can extend my program further</li> <li>- I can identify the setup code I need in my program</li> <li>- I can identify ways the program could be improved</li> </ul>		