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St Columb Minor Academy Computing Disciplinary knowledge progression EYFS/KS1/KS2						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Composite 1: Code						
To push a button to make a programmable toy move. To find a power button on a programmable toy to make it work.	I can run a command on a device I can follow an instruction I can give directions I can find the commands to move a sprite I can use commands to move a sprite	I can follow instructions given by someone else I can choose a series of words that can be enacted as a sequence I can give clear and unambiguous instructions I can create different algorithms for a range of sequences (using the same commands) I can use an algorithm to program a sequence on	Use code to make a musical instrument. Learn how to debug a programme	To create a program in a text-based language To modify a count-controlled loop to produce a given outcome To create a program that uses count controlled loops to produce a given outcome To create a project that includes repetition	Write a program that includes count controlled loops To explain how selection directs the flow of a program (NC) design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. (NC) use sequence, selection, and repetition in programs; work with variables and various forms of input and output. (NC) use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	To design a [variable game] project that builds on a given example To use my design to create a project To evaluate my project To update a variable with a user input To use an conditional statement to compare a variable to a value To develop a program to use inputs and outputs on a controllable device (NC) use sequence, selection, and repetition in programs; work with variables and various forms of input and output. (NC) use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

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		a floor robot I can plan algorithms for different parts of a task I can test and debug each part of the program I can put together the different parts of my program				
Composite 2: Connect						
To find and start a favourite app on a digital device. To search for things with support on a child-safe search engine. EG Kiddle	Use a mouse in different ways. Use a keyboard to type and edit text. Use a computer to paint a picture. Selecting and opening a programme or application.	I can find examples of information technology To recognise that images can be changed	Managing online information Use key phrases in search engines Use search technologies effectively. Copyright and ownership Use of search tools to find and access online	To understand that any personal information they put online can be seen and used by others. To recognise the effect their writing or images might have on others.	To consider the impact of the choices made when making and sharing a video	To identify how to use a search engine To consider the ownership and use of images (copyright) (NC) use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. (NC) use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report

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	Saving and closing a programme or application.		content which can be reused by others.			concerns about content and contact.
Composite 3: Communicate						
To select letters on a keyboard to write simple words and sentences. To know where the spacebar and enter button are and what they can do. To use a mousepad to move a click a cursor, or my finger on a touchscreen to move select.	I can open a word processor I can recognise keys on a keyboard I can enter text into a computer I can use letter, number, and space keys I can use backspace to remove text I can type capital letters I can identify the toolbar and use bold, italic, and underline I can select a	Computing Systems I can open a file I can move and resize images I can demonstrate how information technology is used in a shop I can recognise that information technology can be connected I can explain how information technology helps people Digital Photography I can capture digital	Learn how to make a stop-frame animation or other type of presentation. Use text and images to communicate clearly Use return, backspace and shift keys Learn how to create a magazine.	To use a digital device to record sound To change the composition of an image	To evaluate different ways of working together online	To recognise how we communicate using technology To recognise the need to preview pages To outline the need for a navigation path To recognise the implications of linking to content owned by other people To choose suitable ways to present data (NC) understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration. (NC) use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report

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	word by double-clicking I can select all of the text by clicking and dragging I can change the font I can use 'undo' to remove change I can write a message on a computer and on paper	photos and talk about my experience I can take photos in both landscape and portrait format I can focus on an object Making Music I can use a computer to experiment with pitch and duration				concerns about content and contact
Composite 4: Collect						
To sort a group of objects using two given criteria.	I can match objects to groups I can count objects I can group objects I can count a group of objects I can group similar	Pictograms I can record data in a tally chart I can represent a tally count as a total I can compare totals in a tally chart I can enter data onto a	Create a branching database Use a branching database to answer questions	To use a digital device to collect data automatically To use data collected over a long duration to find information To use	To capture video using a digital device (NC) use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	To describe how search engines select results To explain that formula can be used to produce calculated data To apply formulas to data, including duplicating

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	objects I can group objects in more than one way I can count how many objects share a property	computer I can use a computer to view data in a different format I can use pictograms to answer simple questions about objects I can organise data in a tally chart I can use a tally chart to create a pictogram I can explain what the pictogram shows I can tally objects using a common attribute I can create a pictogram to arrange objects by an attribute I		collected data to answer questions		

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		can answer 'more than'/'less than' and 'most/least' questions about an 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 I can use a computer program to present information in different ways I can share what I have found out using a computer I can give simple				

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		examples of why information should not be shared				