



# Alverton Curriculum Progression in Computing

	EYFS Links	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Computer Science</b>	<p>I can talk about where I am moving a toy vehicle whilst I am moving it.</p> <p>I can describe the route taken by a toy vehicle.</p> <p>I can follow directions to make a route for a toy vehicle.</p> <p>I can plan a route for a toy vehicle.</p> <p>I can follow my own plan for where the vehicle should move.</p>	<p>I can explain that an algorithm is a set of instructions.</p> <p>I know that a computer program turns an algorithm into code that the computer can understand.</p> <p>I can work out what is wrong when the steps are out of order in instructions.</p> <p>I can try and fix my code if it isn't working properly.</p> <p>I can make good guesses of what is going to happen in a program.</p>	<p>I can explain an algorithm is a set of instructions to complete a task.</p> <p>I know I need to carefully plan my algorithm so it will work when I make it into code.</p> <p>I can design a simple program using 2Code that achieves a purpose.</p> <p>I can find and correct some errors in my program.</p> <p>I can say what will happen in a Program.</p> <p>I can spot something in a program that has an action or effect (does something).</p>	<p>I can base a written algorithm for a program upon a real-life situation.</p> <p>I can design an algorithm carefully, thinking about what I want the program to do and how I could turn my algorithm into code.</p> <p>I am able to design a program thinking logically about the sequence of steps required.</p> <p>I can experiment with timers in my programs.</p> <p>I can experiment with the effect of using repeat commands.</p> <p>I can identify the difference in using the effect of a timer or repeat command in my code.</p> <p>I can identify an error in my program and fix it.</p>	<p>I can turn a real-life situation to solve into an algorithm, using a design that shows how I can accomplish this in code.</p> <p>I can use repetition in my code. For example, using a loop that continues until a condition is met such as the correct answer being entered.</p> <p>I can use timers within my program designs more accurately to create repetition effects.</p> <p>I can use selection (decision) in my programming. For example, using an 'if statement' for a question being asked and the program takes one of two paths.</p> <p>I can use variables within my program and know how to</p>	<p>I can make more complex real-life problems into algorithms for a program.</p> <p>I can test and debug my programs as I work.</p> <p>I can convert (translate) algorithms that contain sequence, selection and repetition into code that works.</p> <p>I can use sequence, selection, repetition, and some other coding structures in my code.</p> <p>I can organise my code carefully for example, naming variables and using tabs. I know this will help me debug more efficiently.</p> <p>I can use logical methods to identify the cause of any bug with support to identify</p>	<p>I can turn a complex programming task into an algorithm.</p> <p>I can identify the important aspects of a programming task (abstraction).</p> <p>I can decompose important aspects of a programming task in a logical way, identifying appropriate coding structures that would work.</p> <p>I can test and debug my program as I work on it and use logical methods to identify a cause of a bug.</p> <p>I can identify a specific line of code that is causing a problem in my program and attempt a fix.</p> <p>I can translate algorithms that include sequence, selection and repetition into</p>



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				<p>I can read programs with several steps and predict what it will do.</p> <p>I can identify different ways that the Internet can be used for communication.</p> <p>I can use email such as 2Email to respond to others appropriately and attach files.</p>	<p>change the value of variables.</p> <p>I can use the user inputs and output features within my program, such as 'Print to screen'.</p> <p>I can identify errors in my code by using different methods, such as stepping through lines of code and fixing them.</p> <p>I can read programs that contain several steps and predict the outcomes with increasing accuracy.</p> <p>I recognise the main component parts of hardware which allow computers to join and form a network.</p> <p>I understand that network and communication components can be found in many different devices</p>	<p>the specific line of code.</p> <p>know the importance of computer networks and how they help solve problems and enhance communication.</p> <p>I recognise the main dangers that can be perpetuated via computer networks.</p> <p>I can explain what personal information is and know strategies for keeping this safe.</p> <p>I can use the most appropriate form of online communication according to the digital content.</p>	<p>code and nest these structures within each other.</p> <p>I can use inputs and outputs within my coded programs such as sound, movement and buttons and represent the state of an object.</p> <p>I can interpret (understand) a program in parts and can make logical attempts to put the separate parts together in an algorithm to explain the program as a whole.</p> <p>I can explain the difference between the Internet and the World Wide Web.</p> <p>I can explain what a WAN and LAN is and describe the process of how access to the internet in school is possible.</p>
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					which allow them to join the internet		
<b>ICT</b>	I can make music using a computer.	I can sort sound, pictures and text. I can add sound, pictures and text to a program. I can change content on a file such as text, sound and images. I can name my work. I can save my work. I can find my work.	I can organise data – for example, using a database. I can find data using specific searches. I can use several programs to organise information using binary trees or spreadsheets. I can edit digital data such as data in music composition software. I can name, save and find my work. I can include photos, text and sound in my creations.	I can carry out searches to find digital content on a range of online systems on an Internet search engine. I can collect data and input it into software. I can analyse data using features within software to help such as, formula. I can present data and information using different software such as a branching database or a graphing tool. I can consider what the most appropriate software to use when given a task by my teacher. I can create purposeful (appropriate) content and attach this to emails.	I understand the purpose of a search engine and the main features within it. I can look at information on a webpage and make predictions about the accuracy of information contained within it. I can create and improve my solutions to a problem based on feedback. I can review solutions that others have created, using a checklist of criteria. I can work collaboratively to create content and solutions. I can share digital content using a variety of applications	I can search precisely when using a search engine. For example, I know I can add additional words or removes words to help find better results. I can explain in detail how accurate, safe and reliable the content is on a webpage. I can make appropriate improvements to digital work I have created. I can comment on how successful a digital solution is that I have created. I can work collaboratively with others creating solutions to problems using appropriate software.	I can use filters when searching for digital content. I can explain in detail how accurate and reliable a webpage and its content is. I can compare a range of digital content sources and rate them in terms of content quality and accuracy. I can consider the intended audience carefully when I design and make digital content. I can design and create my own online blogs. I can use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements.



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						I can collaborate by working with others and sharing.	
<b>Digital Literacy</b>	<p>I can talk about what photos show.</p> <p>I can use devices with care.</p> <p>I can find all the letters of the alphabet on a keyboard.</p> <p>I can put spaces between words in my typed work.</p> <p>I can select colours when painting on the computer.</p>	<p>I can say what technology is.</p> <p>I can say what examples of technology are in school.</p> <p>I can say what examples of technology are at home.</p> <p>I know that a chair uses old technology and a smart phone uses new technology.</p> <p>I can keep my login information safe.</p> <p>I can save my work in a safe place.</p>	<p>I can find information I need using a search engine.</p> <p>I know the consequences of not searching online safely.</p> <p>I can share work and communicate electronically.</p> <p>I can report unkind behaviour and things that upset me online, to a trusted adult.</p> <p>I can see where technology is used at school such as in the office or canteen.</p> <p>I understand that my creations in programs need similar skills to the adult world. e.g., The program used for collecting money for school trips.</p>	<p>I can create a secure password.</p> <p>I can explain the importance of having a secure password and not sharing it with others.</p> <p>I can explain the negative consequences of not keeping passwords safe and secure.</p> <p>I understand the importance of keeping safe online and behaving respectfully.</p> <p>I can use communication tools respectfully and use good etiquette.</p> <p>I can report unacceptable content and contact online in more than one way to a trusted adult.</p> <p>I have a good understanding of</p>	<p>I have a good understanding of the online safety rules we learn at school.</p> <p>I can demonstrate how to use different online technologies safely.</p> <p>I can demonstrate how to use a few different online services safely.</p> <p>I know I have a right to privacy both on and offline.</p> <p>I recognise that my wellbeing can be affected by how I use technology.</p> <p>I can report with ease any concerns with content and contact online and know immediate strategies to keep safe.</p>	<p>I have a secure knowledge of online safety rules taught at school.</p> <p>I can demonstrate the safe and respectful use of different online technologies and online services.</p> <p>I always relate appropriate online behaviour to my right to have personal privacy.</p> <p>I know how to not let my mental wellbeing or others be affected by use of online technologies and services.</p>	<p>I can demonstrate safe and respectful use of a range of different technologies and online services.</p> <p>I can identify more discrete inappropriate behaviours online.</p> <p>For example, someone who may be trying to groom me or someone else.</p> <p>I can use critical thinking to help me stay safe online.</p> <p>I know the value of protecting my privacy and others online.</p>



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				the online safety rules we learn at school.			