



## WIJPS Progression of Skills - Computing

Skills Progression	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Computer Science</b>		<p>I can explain that an algorithm is a set of instructions.</p> <p>I know that an algorithm written for a computer is called a program.</p> <p>I can work out what is wrong when the steps are out of order in instructions.</p> <p>I can say that if something does not work how it should it is because my code is incorrect.</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. For example, where the turtle m</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 make a real-life situation into an algorithm for a program.</p> <p>I can design an algorithm carefully, thinking about what I want it to do and how I can turn it into code.</p> <p>I can identify an error in my program and fix it.</p> <p>I can experiment with timers in my programs.</p> <p>I can identify the difference in using the effect of a timer or repeat command in my code.</p> <p>I am able to design a program thinking logically about the sequence of steps required.</p> <p>I can experiment with the effect of using repeat commands.</p> <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>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 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 which allow them to join the internet.</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 the specific line of code.</p> <p>I 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. For example, use 2Email, 2Blog and Display Boards.</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 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>
<b>Information Technology</b>		<p>I can sort sound, pictures and text.</p> <p>I can add sound, pictures and text to a program such as 2Create a Story.</p> <p>I can change content on a file such as text, sound and images.</p> <p>I can name my work.</p> <p>I can save my work.</p> <p>I can find my work.</p>	<p>I can organise data – for example, using a database such as 2Investigate.</p> <p>I can find data using specific searches – for example, using 2Investigate.</p> <p>I can use several programs to organise information – for example, using binary trees such as 2Question or spreadsheets such as 2Calculate.</p> <p>I can edit digital data such as data in music composition software like 2Sequence.</p> <p>I can name, save and find my work.</p> <p>I can include photos, text and sound in my creations.</p>	<p>I can carry out searches to find digital content on a range of online systems, such as within Purple Mash or on an internet search engine.</p> <p>I can collect data and input it into software.</p> <p>I can analyse data using features within software to help such as, formula in 2Calculate (spreadsheets).</p> <p>I can present data and information using different software such as 2Question (branching database) or 2Graph (graphing tool).</p> <p>I can consider what the most appropriate software to use when given a task by my teacher.</p> <p>I can create purposeful (appropriate) content and attach this to emails.</p>	<p>I understand the purpose of a search engine and the main features within it.</p> <p>I can look at information on a webpage and make predictions about the accuracy of information contained within it.</p> <p>I can create and improve my solutions to a problem based on feedback. For example, create a program using 2Code.</p> <p>I can review solutions that others have created, using a checklist of criteria.</p> <p>I can work collaboratively to create content and solutions.</p> <p>I can share digital content using a variety of applications such as: 2Blog, 2Email and Display Boards.</p>	<p>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.</p> <p>I can explain in detail how accurate, safe and reliable the content is on a webpage.</p> <p>I can make appropriate improvements to digital work I have created.</p> <p>I can comment on how successful a digital solution is that I have created. For example, a program built in 2Code that sorts decimals numbers.</p> <p>I can work collaboratively with others creating solutions to problems using appropriate software such as 2Code.</p> <p>I can use collaborative modes such as within 2Connect to work with others and share it.</p>	<p>I can use filters when searching for digital Content.</p> <p>I can explain in detail how accurate and reliable a webpage and its content is.</p> <p>I can compare a range of digital content sources and rate them in terms of content quality and accuracy.</p> <p>I can consider the intended audience carefully when I design and make digital content.</p> <p>I can design and create my own online blogs.</p> <p>I can use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements.</p>
<b>Digital Literacy</b>		<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 such as 'My Work' folder.</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 – for example using 2Email or the display boards.</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 such as programs in 2Code, 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 such as 2Email 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 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</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. 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>