Farnborough Primary School Progression of Knowledge and Skills Computing

	Computer Science	Information Technology	Digital Literacy
EYFS	I can use technological toys with knobs or pulleys, or real objects such as cameras or mobile phones. I can show skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images	I recognise that a range of technology is used in places such as homes and schools. I am familiar with the keyboard, including letters, numbers, full stops, capital letter and space bar. I know that information can be retrieved from computers. I can use the mouse. I can select and use technology for particular purposes which are age-appropriate. I can complete a simple program on a computer.	I can remember rules without needing an adult to remind them. I show resilience and perseverance in the face of a challenge. I know and talk about the different factors that support my overall health and wellbeing (e.g. sensible amounts of 'screen time) I can use my fine motor skills so that I can use a range of tools competently, safely and confidently. I am confident to try new activities and show independence, resilience and perseverance in the face of challenge. I can explain the reasons for rules, know right from wrong and try to behave accordingly.

Farnborough Primary School Progression of Knowledge and Skills Computing

	Computer Science	Information Technology	Digital Literacy
Year 1	I know what an algorithm is. I know what a computer program is. I know what it means to run a program. I can explain the steps in a simple algorithm. I can explain how a computer follows an algorithm. I can write an algorithm on paper. I can write a simple program.	I know what a file is. I know what a computer is. I can use a computer to create a file (document/ presentation/picture etc).	I know the difference between private and public. I can explain why it is important to stay safe online. I can describe what information should be kept private. I can use a computer safely. I can list some dangers of using the internet.

Farnborough Primary School Progression of Knowledge and Skills Computing

	Computer Science	Information Technology	Digital Literacy
Year 2	I know what a "bug" is. I know what it means to debug a program. I can explain why debugging is useful. I can recognise when a program runs correctly or has an error. I can use a debugger to step through a problem. I can spot an error in an algorithm. I can find a bug in a program. I can fix a bug in a program. I can break a problem down into smaller steps. I can predict how a computer program will behave. I can explain whether problems are best solved by computer programs and which by humans. I can compare different algorithms in terms of speed and how easy they are to follow.	I can organise files on a computer. I can open work on a computer. I can edit work on a computer (e.g. proof read and edit text). I can create something useful on a computer.	I can use the internet without giving away private information. I can send a message using a computer without upsetting anyone. I say how my school could make its students safer online. I can recognise something online as bad or wrong. I can recognise something online as good or helpful. I can tell people what they can do if they see anything bad online.

Farnborough Primary School Progression of Knowledge and Skills Computing

	Computer Science	Information Technology	Digital Literacy
Year 3	I know what a program is. I know what debugging is. I know what computer control means. I know what a program is. I can explain the difference between input and output. I can give examples of what algorithms can be used for.	I know what data is. I know what information is. I know what software is. I can explain the difference between data and information. I can explain what the internet can be used for. I am becoming familiar with a selection of programs.	I know what safe means in reference to using IT. I understand why people need to be safe online. I understand how to use technology safely. I can evaluate how safe someone's behaviour is when using technology. I can create something that tells people how to stay safe when using IT.

Farnborough Primary School Progression of Knowledge and Skills Computing

	Computer Science	Information Technology	Digital Literacy
Year 4	I know what simulation means. I know what a physical system is. I can explain why programs need to be tested and de-bugged. I can explain why computers are sometimes used to control things. I know what sequence means. I know what repetition means. I know what a variable is. I can follow a sequence of instructions. I can repeat something a certain number of times and recognise how to do it more efficiently. I can use a variable to keep track of something (e.g. counting).	I can explain what the internet can be used for (revisit from Yr 3). I am able to choose, with support, which program to use to make a piece of work. I can use software to create work for a given purpose. I can use a computer to collect data. I can use a computer to analyse data to show something useful.	I know what responsible means in reference to using IT. I understand why people should be responsible online. I can use technology in a responsible way. I can evaluate how responsible someone's behaviour is when using technology. I can create something that tells people how to use technology responsibly.

Farnborough Primary School Progression of Knowledge and Skills Computing

	Computer Science	Information Technology	Digital Literacy
Year 5	I can design a program on paper. I can split a problem into smaller parts. I can use a program to control a gadget. I can run a program. I know what selection means. I can make a decision based on selection instruction. I can explain why programs need to be tested and debugged. I can recognise whether an algorithm has worked or not.	I know what communication and collaboration are. I can explain what the internet can be used for. I can explain how the internet lets people communicate. I can use the internet to communicate with other people. I can explain why some search results appear higher than others on a search engine. I can search for information on the internet. I can choose, from a given selection, which program to use to make a piece of work. I can use software to create work for a given purpose.	I know what respectful means in reference to using IT. I can understand why people should be respectful online. I can use technology in a respectful way. I can evaluate how respectful someone's behaviour is when using technology.. I can create something that tells people how to use technology respectfully.

Farnborough Primary School Progression of Knowledge and Skills Computing

	Computer Science	Information Technology	Digital Literacy
Year 6	I can use a program to simulate a physical system. I can spot when a program goes wrong. I can debug a program to fix a problem. I can explain the strengths and weaknesses of using a simulation compared to the real thing. I can write programs. I can write a program that controls a gadget. I can make a simulation of a physical system. I can explain how an algorithm works.	I can explain how the internet lets people collaborate. I can use the internet to collaborate with other people. I can describe what can go wrong when using the internet to communicate or collaborate. I can explain the advantages and disadvantages of using the internet to communicate. I can ignore information that is not relevant when searching the internet. I can create advice for others on how to search effectively online. I can evaluate how well a piece of work does what it's supposed to do. I can choose which program to use to make a piece of work.	