



Computing progression of skills

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Online safety and digital literacy	<ul style="list-style-type: none"> I know that the internet is accessed all over the World and know some devices are connected to the internet. I know that they should always ask a responsible adult if they want to use a device and ask for help if they see anything that worries them. I can find information on the internet with support from an adult. 	<ul style="list-style-type: none"> I know devices that enable direct communication between people through images and text. I know what personal information is and that they should never share this with anyone they don't know. I know that they should tell a trusted adult if they are upset or worried about anything on a device. With support be able to use a safe search engine e.g. swiggle 	<ul style="list-style-type: none"> I know that some people are the internet should not be trusted I know that concerns about what they see on-line should be reported to a trusted adult I can create and use a simple password I can use a Search engine to find information given key words I know which websites are useful and begin to understand all might not be trustworthy. I am able to log in and out of websites used at school I know that using technology can sometimes be inappropriate 	<ul style="list-style-type: none"> I know that pictures and text share on-line can end up with strangers I reliably know what to do if they are exposed to unpleasant materials on any device I know that having a balance of online and offline activities is important. I can reliably uses a more complex password to access resources. I know what the key words are to enter into a Search engine to find information they want. I can select useful websites from the results of a search. 	<ul style="list-style-type: none"> I know the risks posed to them by using Social Media, including understanding that people may not be who they say they are. I know that it is irresponsible to share images of friends on-line without their permission. I know that a balance of online and offline activities is important to maintain good health. I know how to report concerns on-line. I can effectively use a search engine to find multiple criteria using AND/OR to refine searches I know how to compare information from different websites and know that some sites may show bias 	<ul style="list-style-type: none"> I know how to reduce the risks posed by using Social Media by managing their friends lists and privacy settings. I am able to maintain a healthy balance of online and offline activities and know that some activities may affect their emotional wellbeing. I know that it is illegal to post or view 'rude' images of children. I know that hacking or misusing someone else's account is illegal. I know that search results can be manipulated by sponsorship and advertising. I know how to validate information found through searches by checking more than one source. I know that some news is 'fake.'

<h1 style="writing-mode: vertical-rl; transform: rotate(180deg);">Information Technology</h1>	<ul style="list-style-type: none"> • I can log onto a computer Or use a QR code to evidence work on a tablet • I can navigate around the screen with a mouse or touchpad • I can type text using space bar for separate words to create something meaningful • I can independently find and use an app on a tablet for instance to take and view a video or photograph 	<ul style="list-style-type: none"> • I can save, retrieve and print work PC or Tablet • I can type and format text including basic punctuation and capital letters Any suitable software • I can confidently use pointing device Mouse, Touchpad • I can add and create simple images • I can combine simple text and graphics, for instance create a poster for a purpose Any suitable software 	<ul style="list-style-type: none"> • I can log in to computer system as myself and can find my documents (personal drive) • I can open shared documents and pictures. • I can use software to create a simple brochure or poster. Publisher or Pages • I can sequence and add to slides to make a simple presentation Keynote, PowerPoint, iMovie • I can create a meaningful document that contains both pictures and text 	<ul style="list-style-type: none"> • I can save a document in a shared folder and retrieve this to continue working on it. Computer. On an iPad work could be shared by Airdrop or equivalent. • I can organise their personal folder effectively for instance by organising work into folders for each year at school • I can change font size and style; include shapes and backgrounds and to use the Spellcheck function • I can use sequence to create an effective presentation or video Keynote, PowerPoint or iMovie. • I can deliver a simple presentation to their peers 	<ul style="list-style-type: none"> • I can share my work from my personal folder to work collaboratively with others. • I can use software to create and effective poster or leaflet. • I can select the best program for the task. • I can use software know how to add data into a prepared spreadsheet to answer simple questions. For instance using Excel • I can independently, prepare an effective presentation to show my learning to others which includes some elements of timing or sequence. For instance in Keynote, PowerPoint, iMovie 	<ul style="list-style-type: none"> • I can use the main features of office software to produce suitable documents and presentations for an audience. Microsoft Office or Apple suite or equivalent. • I can edit a picture. For instance in Paint.net • I can create a simple formula in a spreadsheet to work out given mathematical tasks such as adding a set of numbers. • I can create and sequence a video, add sound effects, transitions and title/subtitles. iMovie – much harder in Windows software. • I can use two or more programmes to create a final piece of work. (eg, edit a picture before inserting into a document).
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Computer Science	<ul style="list-style-type: none"> I can understand which button on a device represents which action e.g. Bee Bot I can program a robot to follow simple sequence of instructions (1-2 turns) I can make a simple sequence of instructions / algorithm I can make simple predications about an algorithm and a program. The Bee Bot will go... I can change (debug) the program to improve the route 	<ul style="list-style-type: none"> I can program a robot to achieve set goal (sequence of 6-7 instructions: maze, point collecting) I can show I am beginning to use block programming e.g. Scratch Junior (Alex, Daisy Dino) to complete a simple program. I can debug more complex problems e.g. a route on a Bee Bot / Blue Bot / Alex / Logo etc... maze. 	<ul style="list-style-type: none"> I can use a block program (Scratch Jun, Scratch, Microbit Blocks)) to make a simple programme using sequencing and timing. I can input a set of instructions according to programming language and environment (Logo, Scratch Jnr, Microbit etc..) I can use repeat loops for instance to create a program to draw regular 2D shapes (Logo, Scratch) I can independently be able to debug basic mistakes I can show I am beginning to use conditionals – If I click here then this happens...Scratch Junior, Scratch, Microbit 	<ul style="list-style-type: none"> I can use a program to sequence, use conditionals and use a variety of inputs and outputs (Scratch-steer an object by using keys /Microbit – show an image when shaken) I can explain how their program works for instance by annotating a print out BI can modify their program and be able to predict the effects of any changes I can break sets of instructions into short steps to achieve goal. For instance drawing repeated squares to make a pattern, 	<ul style="list-style-type: none"> I can customisation to change a working program to change its effect for instance backgrounds and sprite in scratch) I can use loops to achieve goals (Scratch – shapes, letters) I can use variables, conditional sentences (when/then), external triggers and loops to achieve set goals (creating game in Scratch, an interactive slides in Powerpoint or Keynote for instance to create an interactive story, Creating a game in Kodu with a scoring system, Creating an electronic die with a Microbit) 	<ul style="list-style-type: none"> I can use conditional sentences (when/then) to program objects (Kodu, Scratch, Microbit) As above but use mathematical expressions when constructing conditionals e.g. trigger winning when (If loops G5 then...) I can explain what a program will do and accurately predict the effect of changes. I can reliably modify existing algorithms and code to change the effect of the program.



The wider impact of art on the learner

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Engagement and experiences	<ul style="list-style-type: none"> I can talk about a computer game I like to play. E.g. block-a-doodle-do on busy things I can talk about how to programme a Beebot. 	<ul style="list-style-type: none"> I can take a picture using a iPad, then discuss my work with others. I can take part in creating a poster for E-Safety week that demonstrates my understanding of how to keep safe online. 	<ul style="list-style-type: none"> I can recognise the benefits of working in computing on my mental wellbeing and self-expression. I can talk about a time where I've used a new computer programme or app to design my own project e.g. scratch jr to create a new character 	<ul style="list-style-type: none"> I can talk about the benefits of working on a computer for my mental wellbeing and self-expression. I can talk about a time where I've used some new equipment to be creative and how this led to a change or improvement in my development. E.g. Microbits 	<ul style="list-style-type: none"> I can make confident decisions about my own design ideas on gaming experiences I've had over time. E.g. improving a background on Minecraft or using kudo I can talk about a range of opportunities I've had over time to work with new computing software and equipment. E.g. making a recording and editing it using an iPad. 	<ul style="list-style-type: none"> I can talk about my style of expression in my computing based on computing experiences I've had over time. I can pinpoint specific improvements I've been able to make in computing through working with a computing teacher in my linked school. E.g. work on Lego Minecraft storm or year 6 business development using excel.

Careers and life skills	<ul style="list-style-type: none"> • I can name one job that computing can lead to. 	<ul style="list-style-type: none"> • I can name some jobs that are done by people who use computers e.g. you tubers, games designers • I can see how being able to use my creativity in a subject other than computing. 	<ul style="list-style-type: none"> • I can list at least 1 job in each of the subject areas of computing can lead to. E.g. games designers for computer science and editor for digital literacy. • I can see how being able to think creatively can impact positively on subjects other than art. 	<ul style="list-style-type: none"> • I can list several jobs that studying the subject of computing can lead to. • I can talk about my experience in working with new technology e.g. <i>Microbits</i>. 	<ul style="list-style-type: none"> • I can talk about careers in computing and recall working with at least one professional over time. • I can make appropriate decisions about using my computing skills to complement work or understanding within another subject. 	<ul style="list-style-type: none"> • I can talk about my experience in working with others to develop an app or apply my skills when designing my app. • I can talk about opportunities I've had to lead on computing projects in school, and the skills this gave me.
Connecting with parents/carers and community	<ul style="list-style-type: none"> • I can use a tablet or computer at home independently, by moving the mouse or touchpad. 	<ul style="list-style-type: none"> • I can talk about a programme I have used with someone from home, telling them how I designed my own piece of work e.g. taking a photo and using the editing software • I can take a picture for my classes web page 	<ul style="list-style-type: none"> • I can talk to people outside of my home about a piece of software I have used and the choices I made in creating it. E.g. scratch jr • I can show my designs to another class in school and talk about how having my work on display made me feel. E.g. toy design 	<ul style="list-style-type: none"> • I can share my experience in working towards designing my own creations using micro bits or Lego Minecraft with friends in school and people at home. • I can talk about opportunities I've had over time to work on programming with people from home. 	<ul style="list-style-type: none"> • I can make decisions about my own computer design when given a brief for a class show. E.g. using sketch up • I can take on the role of a presenter during a wider school project e.g. an assembly. 	<ul style="list-style-type: none"> • I can show understanding of different briefs given to create my own designs when using new software. E.g. Minecraft, excel, creating an app • I can talk to others about my ideas for a shared project e.g. the Yr6 business project.