	Computing Progression of Skills							
	Class 2		Class 3		Class 4			
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
Online safety and digital literacy	Know that the internet is accessed all over the World and know some devices are connected to the internet. 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. With support from an adult be able to find information on the internet.	Using maps Know devices that enable direct communication between people through images and text. Know what personal information is and that they should never share this with anyone they don't know. 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	Know that some people are the internet should not be trusted Know that concerns about what they see on-line should be reported to a trusted adult Create and use a simple password Use a Search engine to find information given key words Know which websites are useful and begin to understand all might not be trustworthy. Be able to log in and out of websites used at school	Know that pictures and text share on-line can end up with strangers Reliably know what to do if they are exposed to unpleasant materials on any device Know that having a balance of online and offline activities is important. Reliably uses a more complex password to access resources. Know what the key words are to enter into a Search engine to find information they want. Can select useful websites from the results of a search.	Know the risks posed to them by using Social Media, including understanding that people may not be who they say they are. Know that it is irresponsible to share images of friends on- line without their permission. Know that a balance of online and offline activities is important to maintain good health. Know how to report concerns on-line. Effectively use a search engine to find multiple criteria using AND/OR to refine searches Know how to compare information from different websites and know that some sites may show bias	Know how to reduce the risks posed by using Social Media by managing their friends' lists and privacy settings. Be able to maintain a healthy balance of online and offline activities and know that some activities may affect their emotional wellbeing. Know that it is illegal to post or view 'rude' images of children. Know that hacking or misusing someone else's account is illegal. Know that search results can be manipulated by sponsorship and advertising. Know how to validate information found through searches by checking more than one source. Know that some news is 'fake.'		

	Class 2		Class 3		Class 4	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Information technology	Year 1Be able to log onto a computer Or use a QR code to evidence work on a tabletBe able to navigate 	Year 2Be able to save, retrieve and print work PC or TabletKnow how to type and format text including basic punctuation and capital letters Any suitable softwareBe able to confidently use pointing device Mouse, TouchpadBe able to add and create simple imagesBe able to combine simple text and graphics, for instance create a poster for a purpose Any suitable software	Year 3Be able to log in to computer system as themselves and can find their documents (personal drive)Know how to open shared documents and pictures.Know how to open shared documents and pictures.Know how to use software to create a simple brochure or poster. Publisher or PagesKnow how to sequence and add to slides to make a simple presentation Keynote, Powerpoint, iMovieCreate a meaningful document that contains both pictures and text	Year 4Be able to save adocument in a sharedfolder and retrievethis to continueworking on it.Computer. On an iPadwork could be sharedby Airdrop orequivalent.Be able to organisetheir personal foldereffectively forinstance by organisingwork into folders foreach year at schoolKnow how to changefont size and style;include shapes andbackgrounds and touse the SpellcheckfunctionTo be able to usesequence to create aneffective presentationor video Keynote,Powerpoint or iMovie.Be able to deliver asimple presentation totheir peers	Year 5To be able to sharetheir work from theirpersonal folder towork collaborativelywith others.Know how to usesoftware to createand effective posteror leaflet.Be able to select thebest program for thetask.Using software knowhow to add data intoa preparedspreadsheet toanswer simplequestions. Forinstance using ExcelIndependently,prepare an effectivepresentation to showtheir learning toothers which includessome elements oftiming or sequence.For instance inKeynote, Powerpoint,iMovie	Year 6Know how to use the main features of office software to produce suitable documents and presentations for an audience. Microsoft Office or Apple suite or equivalent.Know how to edit a picture. For instance in Paint.netKnow how to create a simple formula in a spreadsheet to work out given mathematical tasks such as adding a set of numbers.To create and sequence a video, add sound effects, transitions and title/subtitles. iMovie – much harder in Windows software.To be able to use two or more programmes to create a final piece of work. (eg, edit a picture before inserting into a document).

	Class 2		Class 3		Class 4	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Computer science	Year 1 Know which button on a device represents which action e.g. Bee Bot Know how to program a robot to follow simple sequence of instructions (1- 2 turns) Make a simple sequence of instructions / algorithm Be able to make simple predications about an algorithm and a program. The Bee Bot will go Be able to change (debug) the program to improve the route	Year 2 Know how to program a robot to achieve set goal (sequence of 6-7 instructions: maze, point collecting) Begin to use block programming e.g. Scratch Junior (Alex, Daisy Dino) to complete a simple program. Be able to debug more complex problems e.g. a route on a Bee Bot / Blue Bot / Alex / Logo etc maze.	Year 3 Be able to use a block program (Scratch Jun, Scratch, Microbit Blocks)) to make a simple programme using sequencing and timing. Inputs sets of instructions according to programming language and environment (Logo, Scratch Jnr, Microbit etc) Use repeat loops for instance to create a program to draw regular 2D shapes (Logo, Scratch) Independently be able to debug basic mistakes Begin to use conditionals – If I click here then this happensScratch Junior, Scratch,	Year 4 Be able to 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) Be able to explain how their program works for instance by annotating a print out Be able to modify their program and be able to predict the effects of any changes Know how to break sets of instructions into short steps to achieve goal. For instance drawing repeated squares to make a pattern,	Year 5 Use customisation to change a working program to change its effect for instance backgrounds and sprite in scratch) Uses loops to achieve goals (Scratch – shapes, letters) Uses 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)	Year 6Use 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 >5 then)Be able to explain what a program will do and accurately predict the effect of changes.Be able to reliably modify existing algorithms and code to change the effect of the program.Be able to make an efficient program by using an