BILSTON CHURCH OF ENGLAND PRIMARY

COMPUTING PROGRESSION OF KNOWLEDGE AND SKILLS

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Online Safety	• I can identify rules that help keep us safe and healthy in and beyond the home when using technology. • I can give some simple examples.	• I can explain rules to keep us safe when we are using technology both in and beyond the home. • I can give examples of some of these rules.	• I can explain simple guidance for using technology in different environments and settings. • I can say how those rules/guides can help me	• I can explain why spending too much time using technology can sometimes have a negative impact on me; I can give some examples of activities where it is easy to spend a lot of time engaged (e.g. games, films, videos).	• I can explain how using technology can distract me from other things I might do or should be doing. • I can identify times or situations when I might need to limit the amount of time I use technology. • I can suggest strategies to help me limit this time.	• I can describe ways technology can affect healthy sleep and can describe some of the issues. • I can describe some strategies, tips or advice to promote healthy sleep with regards to technology	• I can describe common systems that regulate age-related content (e.g.PEGI, BBFC, parental warnings) and describe their purpose. • I can assess and action different strategies to limit the impact of technology on my health (e.g. nightshift mode, regular breaks, correct posture, sleep, diet and exercise). • I can explain the importance of self regulating my use of technology; I can demonstrate the strategies I use to do this (e.g. monitoring my time online, avoiding accidents).

Programming	• I can input a simple sequence of commands to control a digital device with support	• I can create a simple program e.g. sequence of instructions for a Bee Bot • I can use sequence in programs I can locate and fix bugs in my program	• I understand programs execute by following precise and unambiguous instructions • I can create programs on a variety of digital devices • I can debug programs of increasing complexity • I can use logical reasoning to predict the outcome of simple programs	• I can design and create programs • I can write programs that accomplish specific goals • I can use repetition in programs I can work with various forms of input	• I can use simple selection in programs • I can work with various forms of output • I can use logical reasoning to systematically detect and correct errors in programs • I can work with various forms of output	• Define that conditional statements (selection) are used in computer programs • Explain a loop can stop when a condition is met (number of times or event) • Explain a that program flow can branch according to a condition • Use a condition in an if…then… statement to produce a given outcome • Explain an algorithm using sequence, repetition and selection independently • Use logical reasoning to detect errors in increasingly complex programs	• Define 'variable' as something that is changeable • Explain that a variable has a name and a value • Identify a variable in an existing program • Use a variable in a conditional statement to control the flow of a program • Clearly and concisely explain algorithms using sequence, repetition, selection and variables independently • Use logical reasoning to detect errors in increasingly complex program
Music	• I can record sounds with different resources	• I can create a sequence of sounds (instruments, apps/software) • Create a musical composition using software		• I can use smart drums to compose music • I can use smart strings to compose music		• I can create loops using garage band • I can create and edit tracks in garage band	
Animation	• I can animate a simple image to speak in role • I can create a simple animation to tell a story including more than one character.	• I can add filters and stickers to enhance an animation of a character. • I can create an animation to tell a story with more than one scene. • I can add my own pictures to my story animation.		• I can create animations of faces to speak in role with more life-like realistic outcomes. • I can improve stop motion animation clips with techniques like onion skinning. • I can use animation tools in presenting software to create simple animations.		• I can record animations of different characters and edit them together to create an interview. • I can add green screen effects to a stop motion animation. • I can create flip book animation using digital drawings and export as a Gif or video	

Art	• I can take a photograph • I can use a painting app and explore the paint and brush tools		• I can edit a photo (crop, filters, mark up etc) • I can select and use tools to create digital imagery – controlling the pen and using the fill tool • I can cut images with accuarcy to layer on other images.		• I can enhance digital images and photographs using crop, brightness, contrast & resize • I can manipulate shapes to create digital art.		• I can edit a picture to remove items, add backgrounds, merge 2 photos • I can evaluate and discuss images explaining effects and filters that have been used to enhance the media. • Use a 3D drawing app to create a realistic representation of world objects
Publishing			• I can create a quiz • I can create different documents to publish information using purple mash		• I can understand the use of different fonts and size of fonts • I can create a news report		• I can create a webpage and embed video.
Broad Casting		, • I can start to record sounds usings a range of devices		• I can record sound and start to add server recording together		• I can plan a podcast • I can use voice memos to create a series of recording • I can add recordings to garage band • I can add a backing track to a podcast	
Film Making		• I can record a film using the camera app. • I can select images and record a voiceover. • I can highlight and zoom into images as I record.		• I can sequence clips of mixed media in a timeline and record a voiceover • I can trim and cut film clips and add titles and transitions • I can independently create a green screen clip. • I can create my own movie trailer.		• I can use cutaway and split screen tools in iMovie. • I can evaluate and improve the best video tools to best explain my understanding. • I can further improve green screen clips using crop and resize and explore more creative ways to use the tool – wearing green clothes and the masking tool.	
Design			• I can create a 3D shape net • I can add a design onto a net • I can start to combine designs		• I can take a variety of pictures from different angles • I can use different programs to alter an image • I can use the rule of thirds		• I can create a design using a variety of nets • I can create a presentation using a choice of software

Data Handling			• I can sort digital objects into a range of charts such as Venn diagrams, carroll diagrams and bar charts using different apps and software. • I can orally record myself explaining what the data shows me. • I can create a branching database using questions		• Collect data using a digital device • Recognise that a sensor can be used as an input device for data collection • Use a larger data set to find information • Use a computer program to sort data by one attribute • Export information and present data in a table and a graph		Data Handling