CONTENT COVERAGE	EYFS	KS1	LKS2	UKS2
A1	**CONTROL – BEEBOTS** Program the Beebot to move in different directions Use direction cards to create a sequence and program the sequence you have planned Use the picture cards to create a sequence for someone else to follow.	**CONTROL – BEEBOTS** Revise how to program the BeeBot to move in different directions, by giving and following instructions Combine commands to follow a route Explore outcomes when instructions are given in different orders Explain what an algorithm is Describe and write algorithms to complete specific tasks	**CONTROL – SCRATCH QUIZ** Revise use of Scratch Junior in KS1 Remind children what an algorithm is and how to debug to get a desired effect Think about what makes a good quiz – points, multiple choice/free answers Plan a maths quiz – this could be times tables Program instructions to include whether an answer is right or wrong and a scoring system to keep score Add sound effects or a reaction from the Sprite for right or wrong Try a quiz with multiple choice questions and one with free choice answers Debug algorithm Evaluate what worked well and what could be improved	**CONTROL – SCRATCH GAME** Recap Scratch use from LKS2 Look at example game Understand the algorithm behind the game – how it works Plan out a game Storyboard with annotation to explain what the game will look like and how it will work Program sprites to move randomly on chosen backgrounds Debug where necessary and explain debugging Add user controls to allow the game to be played Introduce time and scoring elements Add sound effects Evaluate games and discuss any debugging that needs to take place Share algorithms with others in order to help them to improve their work
A2	**ONLINE SAFETY** Discuss the word 'online' pupils think what 'Online' means to them. How they go online at school and home, what they do online, what they see other people doing online such as older siblings/Mums and Dads? Read 'Smartie the Penguin' and discuss - Create a picture / collage using a range of different materials to represent your	**ONLINE SAFETY** Ask pupils what 'Online' means to them. How they go online at school and home, what they do online, what they see other people doing online such as older siblings? Ask them what they can remember about online safety Watch Lee and Kim's adventure – Animal Magic and discuss together	**ONLINE SAFETY** Discuss rules and how they are often in place to keep us safe Discuss types of rules and places where we have rules, school, road, etc Introduce/recap the SMART Rules and discuss each one Explain that the children will explain the SMART rules to others succinctly in a simple presentation.	**ONLINE SAFETY** Recap rules and why they are in place Recap Online safety taught so far and brainstorm existing knowledge Discuss current internet use within the home (including family) Recap SMART rules, CEOP button, etc Share latest online safety material

	favourite character, or favourite moment in the story Role play and retell the story in your own words Explain that we need to ask adults for help when we are online to make sure we stay safe. Draw a portrait of the adult that you would ask for help if you needed it online. Discuss why it is important to have rules – remind children of the rules 'we should only use the internet when an adult is nearby' and 'we should always talk to an adult if we are not sure about something online' ask the children to go home and discuss these rules with parents – talk homework	Remind them about the rules. To become an internet 'Super Protector' they need to be able to tell you all four rules so go through them again one-by-one. A. STRANGERS - People online are STRANGERS they may not always be who they say they are. B. BE NICE – Be nice to people online, treat them as you would like to be treated C. PERSONAL INFORMATION – Keep your personal information private. Don't share it online D. TELL – If someone or something online makes you feel uncomfortable (you get the uh-oh feeling in your tum) then tell someone you trust Play Sid's Yes or No game available from Think-U-Know website Create a dance to accompany Sid's song as they sing along.	Make the presentation interactive using hyperlinks and including video and audio Evaluate the presentations	Create an online safety quiz using Scratch Give multiple choice answers and have sprites giving helpful safety information when right and wrong answers are selected Take part in quizzes created and evaluate as a class with regards to e-safety information they give
A3	**PRESENTATING – BOOK CREATOR** Discuss what an eBook is (look at some examples – discuss what is different/better than actual books). Draw pictures to retell a story and add sentences. Create eBooks (using Book Creator on IPads) that are fiction and non-fiction. Add sound effects to their book. Read each other's stories (and use the read to me feature to listen to each other's stories).	**GRAPHICS** Pupils learn about a chosen famous person. They research their life and what made them famous using videos (where available), websites, books and biographies shared by the teacher. Save a photograph of a famous person (face on) create digital artefacts (images) of a famous person using a graphics package (Sketchbook) Add detail and imagery associated with the person using a range of graphics tools	**ANIMATION –** Recap Animation work from KS1 Discuss how animation works Watch familiar animations, eg. Wallace and Gromit Plan an animation using a storyboard Create models/backgrounds etc in preparation for animation Take photos and use IMovie to experiment Think about what lighting is best Create animation according to storyboard plan Add sound effects/ background music (not speech)	**SPREADSHEETS** Introduce the concept of a spreadsheet and the origins of them, the fact that they are brilliant for handling large amounts of data and being able to do complex calculations or being able to create tables, charts and graphs easily. Collect data and enter it into a spreadsheet. Label axis and use data entered to create informative charts and graphs. Study and use simple formulas in order to calculate data

		Bring to life image of our famous person using animation software Add blocks of colour and further detail to our digital artefact or image Enhance the picture using imagery specific to the person we are portraying	Add titles, credits etc Watch and evaluate animations	Present findings from data as a presentation (PPT/Google Sheet) to include charts, graphs etc and explanations.
B1	**ONLINE SAFETY** Discuss the word 'online' pupils think what 'Online' means to them. How they go online at school and home, what they do online, what they see other people doing online such as older siblings/Mums and Dads? Read 'Smartie the Penguin' and discuss - Create a picture / collage using a range of different materials to represent your favourite character, or favourite moment in the story Role play and retell the story in your own words Explain that we need to ask adults for help when we are online to make sure we stay safe. Draw a portrait of the adult that you would ask for help if you needed it online. Discuss why it is important to have rules – remind children of the rules 'we should only use the internet when an adult is nearby' and 'we should always talk to an adult if we are not sure about something online' ask the children to go home and discuss these rules with parents – talk homework	**ONLINE SAFETY** Ask pupils what 'Online' means to them. How they go online at school and home, what they do online, what they see other people doing online such as older siblings? Ask them what they can remember about online safety Watch Lee and Kim's adventure – Animal Magic and discuss together Remind them about the rules. To become an internet 'Super Protector' they need to be able to tell you all four rules so go through them again one-by-one. A. STRANGERS - People online are STRANGERS they may not always be who they say they are. B. BE NICE – Be nice to people online, treat them as you would like to be treated C. PERSONAL INFORMATION – Keep your personal information private. Don't share it online D. TELL – If someone or something online makes you feel uncomfortable (you get the uh-oh feeling in your tum) then tell someone you trust	**ONLINE SAFETY** Discuss rules and how they are often in place to keep us safe Discuss types of rules and places where we have rules, school, road, etc Introduce/recap the SMART Rules and discuss each one Practice using ToonDoo to create a comic book – look at how to add images, resize, add thought and speech bubbles Plan and draw out a cartoon which explains one of the SMART rules (use a paper storyboard) Use ToonDoo to create your 2d cartoon book Evaluate how effective these are in explaining the messages of SMART	**ONLINE SAFETY** Recap rules and why they are in place Recap Online safety taught so far and brainstorm existing knowledge Discuss current internet use within the home (including family) Recap SMART rules, CEOP button, etc Share latest online safety material Look at a range of podcasts and see how they are arranged as a series of recordings. Could produce a single episode covering all of the smart rules but it is better to plan a series. Different groups or pairs of children could work on different letters of the word SMART with a group producing an introductory podcast which sets the scene. Plan the content and work out how to explain each one Create a new file and record. Save files. Edit and improve the audio presentation by combing media from a variety of sources Add theme music.

		Create videos with one child acting as the person asking the questions and one person answering questions about the 4 rules – in a reporter style Share these videos together		Share podcasts with others and evaluate contents in relation to the safety information contained.
B2	**CONTROL – BEEBOTS** Program the Beebot to move in different directions Use direction cards to create a sequence and program the sequence you have planned Use the picture cards to create a sequence for someone else to follow	**CONTROL - SCRATCH JUNIOR** Get to know the Scratch Jnr interface by programming a narrative story. Add more scenes and make them change from one to another Add a sound bar Check that the algorithm works and debug Create a game	**NETWORKS, THE INTERNET AND SEARCHING** Understand the term network, discuss what a computer network is and how it works Discuss key vocabulary and create glossary Get Dan to explain how the school's network works and design posters explaining this Understand what the internet is, discuss how it works Research the history of the internet, who invented it, etc Discuss what you can now do that you couldn't do before internet Learn how to search safely, discuss how more specific search terms get better results Recap e-safety – SMART – Reliable Look at websites which are not accurate factually (Octopus tree etc) decide which are real or not from a selection of websites Encourage fact checking on more than one site Search safely and accurately a given topic and collaborate on a class PowerPoint using Google Classroom	**MICROBIT INTRODUCTION** Program the MicroBit to respond to a variety of inputs to control the LED array output of the MicroBit to display a number of messages Start by creating a simple program to respond to various inputs by displaying letters, numbers, symbols or scrolling messages on the MicroBit's LED array. Program button A to display a message then button B to display another message. Challenge pupils to create as many messages as they can triggered by different inputs! Create a random number and assign it to a variable and then to use selection to decide what to show Create a Rock, Paper, Scissors game where the MicroBit generates and stores a random number between 0 and 2 inside a variable and then selects which symbol to display based on the variable value. Program to create a random dice Use built in sensors to create a thermometer and a compass. Send messages between more than one micro-bit using radio waves

				Set up a spy scenario where important messages are conveyed between children using micro-bit messaging
B3	**PRESENTATION – BOOK CREATOR** Discuss what an eBook is (look at some examples – discuss what is different/better than actual books). Draw pictures to retell a story and add sentences. Create eBooks (using Book Creator on IPads) that are fiction and non-fiction. Add sound effects to their book. Read each other's stories (and use the read to me feature to listen to each other's stories).	**ANIMATION** Read a story as a class and retell using only 6 sentences. Draw these 6 parts out using a storyboard template. Decide which characters are needed for the story and make these as puppets (2d on lollipop sticks) Draw backgrounds for each scene Demonstrate how to take a photo of one of the puppets on the background, then move it slightly and repeat Show how these images can be linked together to create an animation Use ZU3D Stop Motion for the children to create their own animation of the story using their puppets and backgrounds Add narration afterwards to the animation Add titles, credits and theme music	**GREEN SCREEN PRESENTATIONS –** Explain that using green screen technology you can record narration and acting that take place in the foreground onto any background. Show examples. Set up a green screen area and experiment with lighting, asking children to help evaluate which is best. Using test material recorded with a few children (or adults) children try putting different backgrounds in, eg. bottom of the sea, in an animal enclosure etc. Explain that you are going to go back to Victorian times in order to teach others about this era. Choose different aspects and write a script to film in front of the green screen. Choose Victorian backgrounds to appear in by placing recorded material over the top. Add titles, sound effects and background music. Evaluate work.	**AUGMENTED REALITY –** Understand what Augmented Reality (AR) and discuss games like Pokémon Go which use it Plan out on paper the parts or chapters of your book and story-board which bits are going to use Augmented Reality to enhance them You need to have your trigger document which will become the printed book, leaflet or display poster Your trigger document coups be anything printed Create animations or videos to expand on the content of your trigger document. For a story it could be animations of particular scenes from the story. You could use a camera (or camera app on the iPad/Android tablet) to record live video of pupils explain concepts for non-fiction texts. Use Aurasma to create the augmented reality experience. Test out augmented reality experiences and evaluate.