Computing Progression of Skills

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|  | ***Year 1*** | ***Year 2*** | ***Year 3*** | ***Year 4*** | ***Year 5*** | ***Year 6*** |
| ***On the Doorstep*** | **Digital Galleries (Information Technology):**  Create a simple animation with moving characters and voice recordings  Use a camera to capture images which are in focus  Select options to change the appearance of digital content  Apply edits to digital content to achieve a particular effect  Create digital galleries using images and text  Use photo editing tools to crop images | **Technology around us (Information Technology)**  Develop an understanding of what IT is and how it is used.  Investigate how IT improves out world  Learn how to use It safely | **Photo Editing Presentations**  **(Information Technology):**  Use a camera accurately to capture interesting perspectives  Apply edits to digital content to achieve a particular effect and save them as both images and videos  Create a presentation with slides  Select options to change the appearance of digital content and explore tools to edit it  Combine images and text for different effects  **Stop-Motion Animations**  **(Information Technology):**  Plan a simple animation using a storyboard  Take a series of pictures and combine them to form an animation  Add text, graphics and sound effects to improve an animation using editing  Tools  Create an animation with moving characters/objects, keeping the camera steady, using 'onion skinning’  Combine animated characters and voice recordings for particular effects | **Presentations**  **(Information Technology):**  Combine text (fonts, colours, backgrounds), images, voice recordings and videos to create a presentation  Create a presentation with slides with animations and transition effects  Using photo editing tools to improve the quality of images  Create and edit a video by combining text, images and music  Use a keyboard accurately with two hands to type and format documents  When searching on the internet for content to use, explain why you need to consider who owns it and whether you have the right to reuse it | **Systems and Searching (Information Technology)**  Develop an understanding of computer systems and how information is transferred between systems and devices.  Explain input, output and process aspects of a variety of different real-world systems.  Discover how information is found on the World Wide Web  Learn how search engines work and what influences searching and ranking. | **Websites**  **(Information Technology):**  Work independently on a topic to build and create a website with pages, titles, images, videos and text  Recognise the audience when designing and creating an app/website  Create variables in spreadsheets and understand their role in a program  Edit videos, graphics and documents independently to create a website  Format a digital document to present ideas  Design a suitable brand for a business and promote it  Create a spreadsheet with formulas for profit and loss of a business  Design and build a web page and share it online  Combine text and images to create eye-catching social media adverts  Create a video for a marketing campaign and make improvements following feedback |
| ***Down the Road*** | **Programming Mini Topic**  **(Computer Science):**  Create simple programs using beebots  Design and create ‘unplugged’ programs for others to play  Predict the outcomes of a program  **Digital Posters**  **(Information Technology):**  Create posters by adding images to frames, editing text by changing font style, colour and size  Create images with different layers by placing one image on top of another  Combine words and images to create word art  Type words correctly using a keyboard  Collect images by capturing screenshots and editing them  Explore augmented reality and capture images | **Digital Books**  **(Information Technology)**  Create digital books combining text, images, and sounds  Type words in a speech bubble using a keyboard  Combine text and images to create a video presentation  Edit video content to improve it  Collect images by capturing screenshots and editing them  Present information on a topic using images, text boxes and voice recordings  Type words correctly using a keyboard  Create a contents page | **Desktop publishing (Information Technology)**  Understand that texts and images can be used to communicate both offline and online  Learners will be introduced to the terms ‘templates’, ‘orientation’, and ‘placeholders’ and begin to understand how these can support them in making their own template for a magazine front cover  Add text and images to create own work | **Programming Games**  **(Computer Science):**  Create a program using a range of events/inputs to control what happens  Work with various forms of input/output  Write programs that accomplish specific goals  Use selection in algorithms and programs, i.e. if… then…  Use logical reasoning to write simple algorithms explaining the sequence commands should run in  Solve problems by decomposing into smaller parts  Debug programs so they run correctly  Review a game and make improvements by debugging  Understand why it’s important to know your audience when designing games  Describe ways technology can affect health  Explain the importance of self-regulating the use of technology | **Games**  **(Computer Science):**  Use commands, loops, selections, debugging and variables to design and build a game  Experiment with different codes to test each element of a game until a desired outcome is reached  Make predictions on what will happen in a program when inputs are changed  Test, debug and improve programs  Make changes to digital content to animate characters in the game  Use creative tools to create a marketing campaign for a game  Identify the pros and cons of different games  Describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose | **Presentations**  **(Information Technology):**  Plan a digital resource to teach a specific audience something new  Make choices on the best digital software available to present my ideas  Work independently to combine a range of tools (text, video, graphics, images) to present ideas clearly for an audience to follow  Work independently to create a presentation that includes graphics, images and movies  Deliver a presentation to an audience using digital tools |
| ***Over the Water*** | **Programming Mini Topic**  **(Computer Science):**  Create simple programs using beebots  Design and create ‘unplugged’ programs for others to play  Predict the outcomes of a program | **Programming With Debugging**  **(Computer Science):**  Create simple programs using digital software  Debug an error in a simple algorithm  Understand that instructions in an algorithm need to be precise and unambiguous  Use logical reasoning to predict the behaviour of simple programs  Use simple repeats in programs  Use basic selections in programs and explain using the language if … then  Understand basic programming techniques | **Movies**  **(Information Technology):**  Create and edit a video/animation combining text, images and music  Plan a movie with a script that has a beginning, middle and end and combines text, music and images  Explore augmented reality and capture images and videos  Explore green screen technology and capture and edit videos | **Programming Games**  **(Computer Science):**  Create a program using a range of events/inputs to control what happens  Work with various forms of input/output  Write programs that accomplish specific goals  Create programs including repeat commands  Solve problems by decomposing into smaller parts  Debug programs so they run correctly  Review a game and make improvements by debugging | **Selection quizzes**  **(Information Technology):**  Learn how the If….Then structure can be used to select different outcomes depending on whether a condition is true or false.  Use knowledge of writing programs and using selection to control outcomes.  Design a quiz in response to a given task and implement it as a program. | **Games**  **(Computer Science):**  Use selections and procedures in programs to draw shapes, patterns and pictures  Create more complex programs including commands, debugging, loops, repeats, selections, variables and procedures  Create simple variables and understand their role in a program  Use logical reasoning to detect and correct errors in algorithms  Use editing tools to label digital images |
| ***Digital Literacy spread throughout topic. We use Eaware to teach this. It covers a range of topics to include:***   * Friends * Private Information * Digital Footprints * Time Online * Passwords * Self -Image * Things are not always as they seem * Photos * Cyberbullying * Phishing * Fake News * Privacy Settings * Gaming * Naked Pictures | | | | | | |