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 recordingsUse a camera to capture images which are in focusSelect options to change the appearance of digital contentApply edits to digital content to achieve a particular effectCreate digital galleries using images and textUse 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 worldLearn how to use It safely | **Photo Editing Presentations****(Information Technology):**Use a camera accurately to capture interesting perspectivesApply edits to digital content to achieve a particular effect and save them as both images and videosCreate a presentation with slidesSelect options to change the appearance of digital content and explore tools to edit itCombine images and text for different effects**Stop-Motion Animations****(Information Technology):**Plan a simple animation using a storyboardTake a series of pictures and combine them to form an animationAdd text, graphics and sound effects to improve an animation using editing ToolsCreate 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 presentationCreate a presentation with slides with animations and transition effectsUsing photo editing tools to improve the quality of imagesCreate and edit a video by combining text, images and musicUse a keyboard accurately with two hands to type and format documentsWhen 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 WebLearn 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 textRecognise the audience when designing and creating an app/websiteCreate variables in spreadsheets and understand their role in a programEdit videos, graphics and documents independently to create a websiteFormat a digital document to present ideasDesign a suitable brand for a business and promote itCreate a spreadsheet with formulas for profit and loss of a businessDesign and build a web page and share it onlineCombine text and images to create eye-catching social media advertsCreate a video for a marketing campaign and make improvements following feedback |
| ***Down the Road*** | **Programming Mini Topic****(Computer Science):**Create simple programs using beebotsDesign and create ‘unplugged’ programs for others to playPredict the outcomes of a program**Digital Posters** **(Information Technology):**Create posters by adding images to frames, editing text by changing font style, colour and sizeCreate images with different layers by placing one image on top of anotherCombine words and images to create word artType words correctly using a keyboardCollect images by capturing screenshots and editing themExplore augmented reality and capture images | **Digital Books****(Information Technology)**Create digital books combining text, images, and soundsType words in a speech bubble using a keyboardCombine text and images to create a video presentationEdit video content to improve itCollect images by capturing screenshots and editing themPresent information on a topic using images, text boxes and voice recordingsType words correctly using a keyboardCreate a contents page | **Desktop publishing (Information Technology)**Understand that texts and images can be used to communicate both offline and onlineLearners 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 coverAdd text and images to create own work | **Programming Games****(Computer Science):**Create a program using a range of events/inputs to control what happensWork with various forms of input/outputWrite programs that accomplish specific goalsUse selection in algorithms and programs, i.e. if… then…Use logical reasoning to write simple algorithms explaining the sequence commands should run inSolve problems by decomposing into smaller partsDebug programs so they run correctlyReview a game and make improvements by debuggingUnderstand why it’s important to know your audience when designing gamesDescribe ways technology can affect healthExplain the importance of self-regulating the use of technology | **Games****(Computer Science):**Use commands, loops, selections, debugging and variables to design and build a gameExperiment with different codes to test each element of a game until a desired outcome is reachedMake predictions on what will happen in a program when inputs are changedTest, debug and improve programsMake changes to digital content to animate characters in the gameUse creative tools to create a marketing campaign for a gameIdentify the pros and cons of different gamesDescribe 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 newMake choices on the best digital software available to present my ideasWork independently to combine a range of tools (text, video, graphics, images) to present ideas clearly for an audience to followWork independently to create a presentation that includes graphics, images and moviesDeliver a presentation to an audience using digital tools |
| ***Over the Water*** | **Programming Mini Topic****(Computer Science):**Create simple programs using beebotsDesign and create ‘unplugged’ programs for others to playPredict the outcomes of a program | **Programming With Debugging****(Computer Science):**Create simple programs using digital softwareDebug an error in a simple algorithmUnderstand that instructions in an algorithm need to be precise and unambiguousUse logical reasoning to predict the behaviour of simple programsUse simple repeats in programsUse basic selections in programs and explain using the language if … thenUnderstand basic programming techniques | **Movies****(Information Technology):**Create and edit a video/animation combining text, images and musicPlan a movie with a script that has a beginning, middle and end and combines text, music and imagesExplore augmented reality and capture images and videosExplore green screen technology and capture and edit videos | **Programming Games****(Computer Science):**Create a program using a range of events/inputs to control what happensWork with various forms of input/outputWrite programs that accomplish specific goalsCreate programs including repeat commandsSolve problems by decomposing into smaller partsDebug programs so they run correctlyReview 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 picturesCreate more complex programs including commands, debugging, loops, repeats, selections, variables and proceduresCreate simple variables and understand their role in a programUse logical reasoning to detect and correct errors in algorithmsUse 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
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