**Y3 Computing Whole School Progression of Knowledge and Skills**

**Digital Literacy, Online Safety and ICT**

**Computational Thinking**

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| **YEAR THREE** |
| **Vocabulary/Significant Knowledge** | **Communicating: Text and Images**What makes a good poster? | **Communicating: Multimedia**How do I use a computer as a musician? | **Understanding and Sharing Data**How do we use databases to find out information? | **Programming A**How do I use repetition in programs? | **Programming B**How do I use forever loops in programs? |
| Font Image Graphic Copyright Design Save Open Document File Folder Apps | Copyright Audio Tempo Pitch Record Play Stop Pause Media Loop Export Track Edit | Data Information Database Record Field Search Chart Personal information | program repetition algorithm repeat sequence loop sprite count-controlled loop to debug code | program algorithm sequence sprite to debug repetition events input forever loops code test |
| **Enquiry Questions** | Can you see the different formats of data used, e.g. sound, video, text and image. Why do we use different formats?Can you create a list of key features of successful posters?Can you draft a poster?Can you create a poster in a given package?Where can we copyright-free images to use?What different kind of software we might use to create a poster? | What types of computers and devices do we use to listen to music, watch videos and view photos.?Can you explore music composition software?Can you experiment to create a variety of musical compositions?Can you change the tempo of a composition to change the mood? Can you review and refine work?Who owns a piece of music? | What programs have we used already?What has been used to present information in different ways? Why do we use different formats? What are the key features?Can you navigate a simple database using sort and search tools to find information and to answer questions?Why do we use computers for this kind of task?Why are personal information resources valuable to companies? Can you create a class database in the form of Top Trumps Cards? | When using algorithms why is it important to use the correct sequence of instructions?How do repeat commands change the algorithm?Why do we need to plan out our programs away from the computer by writing algorithms? | What is an input device?How did we use repeat commands before?Can you complete the Everyday Repetition activity? |
| **Skills** | - Present ideas and information by combining mediaindependently, e.g. text and images.- Design and create simple digital content for apurpose/audience, e.g. poster.- Edit digital content to improve it, e.g. resize text.- Identify the features of a good piece of digital content.- Explain why we use technology to create digital content.- Recognise why we use different types of media toconvey information, e.g. text, image, audio, video. | - Recognise charts, pictograms and databases, and why we use them. - Present information using a suitable chart - Explore a record card database to find out information. - Use filters in a database to find out specific information. - Name the key parts of a database, e.g. record, field, search. - Answer questions about information in a database. - Name some benefits of using a computer to create charts and databases. - Recognise that search engines store information in databases. | - Predict the outcome of a block or textbased program (Scratch/Logo).- Successfully modify an existing program, e.g. change background, number of times things happen.- Identify repeated steps in a program or algorithm.- Create examples of algorithms containing count-controlled loops.- Use a count-controlled loop (e.g. repeat 3 times) to make a program more efficient.- Recognise that we can create an algorithm to help plan out a program.- Recognise a forever loop in a program or algorithm.- Use a forever loop in a program to keep something happening.- Identify errors in a block or text-based program and correct them.- Recognise that different inputs can be used to control a program. |