**Y1 Computing Whole School Progression of Knowledge and Skills**

**Digital Literacy, Online Safety and ICT**

**Computational Thinking**

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| **YEAR ONE** | | | | | |
| **Vocabulary/Significant Knowledge** | **Communicating:**  **Text and Images**  How do I use the school computer  independently? | **Communicating:**  **Multimedia**  How do I record sounds and pictures? | **Understanding and**  **Sharing Data**  How do I present data using pictures? | **Programming A**  What is an algorithm? | **Programming B**  What is a program? |
| Computer, Technology, Hardware  Software, Avatar, Password  Save, Open, Document, File  Folder, Font, Edit, Apps, Personal, information. | Sound, Text, Image, Video, File, Record, Play  Stop, Pause, Media, Photograph, Digital, camera, Focus, Close up. | Information / data  Pictogram, Chart (bar / pie / line), Personal information, Private/public  More/less/fewer/least/  Most. | Program, to program  Algorithm, computer,  Sequence, instructions  Commands, Plus directional language:  Forwards, backwards, left turn, right turn. | Program, to program  Algorithm, computer  Sequence, instructions  Commands, to debug  Sprite, Plus directional language if using Bee-Bot: forwards, backwards  left turn, right turn. |
| **Enquiry Question** | What is a computer?  What are the different ways we can use computers?  What are the basics of using a computer?  How can we be safe on the computer and what are the rules?  What is meant by personal information? | What technology do you use at home and in school?  Can you identify different sounds made by computers?  How can you record your own sounds?  Can you use a camera or tablet to take photographs?  Can you take the photographs from different angles?  What do you do if you see an upsetting photograph on line? | What is a chart and why do we use them?  Can you create a pictogram?  What do pictograms tell us? Can you answer questions about the data?  Can you plan out a pictogram on a topic? Can you gather data from your peers?  What software could we use to create our pictogram?  Can you enter the data into the software to create pictograms and save your work? | What different kinds of technology is there, what do we use it for and how do we control it?  Look at different digital activities – how do we control what happens?  What is the algorithm for how it works?  Can you investigate algorithms?  Can you complete some programming  Activities? | What is an algorithm?  Can you complete some unplugged  activities around algorithms?  How are digital devices controlled?  What computer games do the pupils play at home? Who created these?  Would you like to code your own games? What  kind of games would you create? |
| **Skills** | - Create digital content, e.g. digital art.  - Choose media from a selection (e.g. images, video, sound) to present information on a topic.  - Recognise that you can find out information from a website.  - Recognise that you can edit digital content to change its appearance.  - Select basic tools/options to change the appearance of digital content, e.g. filter on an image / font / size of paintbrush.  - Combine media with support to present information, e.g. text and images | | Recognise different forms of digital content, i.e. text, image, video and audio.  - Collect simple data (e.g.  likes/dislikes) on a topic.  - Present simple data using images, e.g. number of animals.  - Recognise charts and pictograms and why we use them.  - Explain information shown in a simple chart or pictogram.  - Modify simple charts/pictograms,  e.g. add title, item or labels.  - Identify the key features of a chart or pictogram.  - Collect data on a topic (eye colour, pets etc.) and present in a pictogram or chart. | - Recognise that computers don’t have a brain.  - Explain that we control computers by giving them  instructions.  - Create a simple program e.g. to control a floor robot.  - Create a simple algorithm.  - Predict the outcome of a simple algorithm or program.  - Explain what an algorithm is  – a sequence of instructions to make something happen.  - Recognise that the order of instructions in an algorithm is important.  - Debug an error in a simple algorithm or program e.g. for a floor robot | |