East Preston Infant School Progression of Skills within the Computing Curriculum

Skills	EYFS – Reception	Year 1	Year 2
Use Technology safely and respectfully.	- Use ICT equipment respectfully with kind hands.	- Use and search the web safely according to the e-safety policy to find ideas for an illustration (We are Painters) - Use music software to record and create music. (We are rhythmic)	- Be aware of how to use games safely and in balance with other activities (We are games testers). - Being safe while using online forums and games (We are game testers). - Develop research skills through searching for information on the internet (We are researchers). - Understanding how to keep safe when opening attachments and when emailing on the internet (We are detectives).
	E-safety is taught at the start of each new unit and on an ongoing basis in EYFS. Safer internet day is delivered across the school in the spring term and regular assemblies recap on keeping safe using technology.		
Understand what algorithms are.	- Using beebots through exploratory play.	- Beginning by sequencing skills and instructions to understand order of events. (We are treasure hunters) - Programming a blue bot to get from one place to another accurately. - Understanding the concept of debugging when encountering a problem in their code. - Develop and record sequences of instructions as an algorithm. (We are treasure hunters) - Applying these skills to Scratch Junior through coding on iPads.	- Develop and record sequences of instructions as an algorithm using blue bots. (We are astronauts). - Have a clear understanding of algorithms as sequences of instructions. Then progressing to Scratch. - Describe carefully what happens in computer games through a step-by-step progress, discussing how they think a particular computer game was created (We are games testers). - Sorting and classifying a group of items by answering questions. (We are zoologists).
Create and debug simple programs.	- Use beebots with a given purpose through exploratory play.	- Debug their programs when encountering issues with their algorithm, using blue bots (We are treasure hunters. - Select and use appropriate painting tools to create, manipulate and change images on the computer.(We are painters) - Use sound on a music software to record or edit what they have created (We are rhythmic).	- Convert simple algorithms to programs through Scratch (We are astronauts). - Spot and fix (debug) errors in their programs in Scratch (We are astronauts). - Test their game predictions through their code (We are games testers). - Improve note-taking skills through the use of mind-mapping (We are researchers). - Collecting data using tick charts and tally charts when trying to find who stole a cake through the process of elimination(We are zoologists).
Use logical reasoning to predict the behaviour of simple programs.	- Predict what will happen when an input device is used.	- Predict how their programs will work when programming a blue bot (We are treasure hunters). - Understand how the use of 2paint and 2create a story differs from using real paint and paper (We are painters)	- Predicting what a simple program will do (computer games) and compare to more advanced Scratch programs. Use logical reasoning to explain and predict what a program will do (We are games testers). (We are astronauts).

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Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	- Become familiar with the use of keyboard, mouse and screen input devices.	- Creating an illustration for a particular purpose through the use of 2paint a picture and 2create a story (We are painters). - Know how to save, retrieve and change their work on 2paint and 2create a story (We are painters). - Recording, creating music and developing skills in saving and storing sounds on software (We are collectors/rhythmics).	- Use a digital camera or camera app appropriately (We are photographers). - Take digital photographs through touching the correct buttons and knowing how to switch from photograph to video (We are photographers). - Review and reject or rate images they take (We are photographers). - Edit and enhance their photographs on Microsoft Word (We are photographers). - Develop presentation skills through creating and delivering a short multimedia presentation on Microsoft Power Point (We are researchers) - Use simple charting software to produce pictographs and other basic charts (We are zoologists).
Recognise common uses of information technology beyond school.	- Identify the similarities between ICT equipment at school and at home.	- Talk about and reflect on their use of computing skills through use of software or apps (We are collectors/rhythmics). - Comparing blue bots with other programmable devices that they might use at home. (We are treasure hunters)	- Think critically about computer games and their use (We are games testers). - Select their best images to include in a shared portfolio (We are games testers).
EYFS – Reception -Children recognise that a range of technology is used in places such as homes and schools. -Children select and use technology for particular purposes.		**Key Stage 1 National Curriculum** -Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation -Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems -Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems -Are responsible, competent, confident and creative users of information and communication technology.	