Tenacres First School - Computing skills progression

Area	Year 1	Year 2	Year 3	Year 4
E-safety and Digital Citizenship	• I understand why it is important to use and keep my personal passwords private. • I can discuss personal safety when using the Internet, including at home. • I understand and abide by internet safety rules. • I know how to report inappropriate content to a responsible adult. • I know who to turn to if they feel threatened in any way. • I am beginning to show an awareness of the range of devices and tools I encounter in everyday life. • I can make simple choices to control a simple simulation program.	• I understand why it is important to use and keep my personal passwords private. • I can discuss personal safety when using the Internet, including at home. • I understand and abide by internet safety rules. • I know how to report inappropriate content to a responsible adult. I know who to turn to if they feel threatened in any way. • I have an awareness of a range of inputs to a computer (IWB, mouse touch screen, microphone, keyboard, etc) • I can play an adventure game and use a simple simulation, making choices and observing the results. • I understand that computers are good at replicating real life events and allowing them to explore contexts that are otherwise not possible.	• I understand there are rules to keep me safe when communicating electronically, work within these rules understanding what they are and why they exist. • I know of other methods of communication and discuss the importance of personal safety at home as well as in school. • I am beginning to show discernment in my use of computing devices and tools for a particular purpose and explain why my choice was made. • I can use models and simulations to find things out and solve problems. • I recognise that simulations are useful in widening experience beyond the classroom. • I can make simple use of a spreadsheet to store data and produce graphs.	• I understand there are rules to keep me safe when communicating electronically, work within these rules understanding what they are and why they exist. • I know of other methods of communication and discuss the importance of personal safety at home as well as in school. • I make choices about the devices and tools I use for specific purposes and explain them in relation to the context. • I am beginning to show an awareness of specific tools used in working life. • I can set up and use a spreadsheet model to explore patterns and relationships. • I can make predictions. • I know how to enter simple formulae to assist this process.
Programming	• I can control simple everyday devices to make them produce different outcomes. • I can explore outcomes when individual or combinations of buttons are pressed on a programmable toy/floor robot • I can sequence a series of instructions (algorithms) to create a larger program • I can create a simple on-screen sequence.	• I can control a device, on and off screen, making predictions about the effect their programming will have. • I can produce a storyboard of instructions algorithm). • I can sequence a series of instructions (algorithms) to create a larger program on screen. • I can sequence a series of instructions (algorithms) to create a larger program.	• I can design, write and run executable programs using a programming language on and off screen. • I can to debug an algorithm (set of instructions) and correct any errors. • I can create simple algorithms using inputs and outputs e.g. keyboard, mouse etc.	• I can design, write and run executable programs using a programming language. • I can use repetition in Scratch to make them more efficient. • I can use 'selection' in a programming sequence i.e. use 'if… then… else…' type actions or statements e.g. if a character is touching a wall then bounce back, else move forward.

Creativity and Multimedia	• I can work with others and with support to contribute to a digital class resource which includes text, graphic and sound. • I can use a range of simple tools in a paint package / image manipulation software to create / modify a picture. • I can choose suitable sounds from a bank to express my ideas.	• I can generate my own work, (with help where appropriate with multimedia) combining text, graphics and sound. • I can save and retrieve and edit my work. • I can use a range of tools in a paint package / image manipulation software to create / modify a picture to communicate an idea • I can create a simple animation to tell a story. • Produce a simple presentation incorporating sounds the children have captured, or created.	• I can record and present information integrating a range of appropriate media combining text and graphics in printable form and sound and video for on-screen presentations which include hyperlinks. Begin to show an awareness of the intended audience and seek feed-back. • I can manipulate digital images using a range of tools in appropriate software to convey a specific mood or idea. • I can create a simple recording, selecting and importing already existing music and sound effects as well as recording their own.	• I can use advanced tools in word processing / DTP software such as tabs, appropriate text formatting, line spacing etc appropriately to create quality presentations appropriate for a known audience. • I can create a short animated sequence from captured images in simple storyboarding software, to communicate a specific idea. • I can capture "footage" from cameras into simple movie editing software. • I can arrange, trim and cut clips to create a short film that convey meaning. • I can Import music and stills into video editing software and add to film projects. • I can add simple titles and credits. • I can create multiple track compositions that contain a variety of sounds.
	• I can record short speech. • I can Compose music from icons using online music software.			
Communication and Computer Networks	• I can contribute ideas to a class post using J2E bloggy. • In a group, I can explore information from a variety of sources (electronic, paper based, observations of the world around them, etc.). • I show an awareness of different forms of information • I show an awareness that what I create on a computer or tablet device can be shown to others via another device (e.g. printer, projector, Apple TV)	• I can work collaboratively by email to share and request information. • I can use a search engine to find specific relevant information to use in a presentation for a topic. • I can save and retrieve my work. • I am beginning to show an awareness that computers can be linked to share resources • I can use websites and demonstrate an awareness of how to manage their journey around them (e.g. using the back/forward button, hyperlinks)	• I can Share ICT work they have done electronically by school blog or uploading to authorised sites. • I can upload a blog post (using J2E) to communicate an idea. • I am beginning to show an awareness that computers can be linked to share resources • I show an awareness that not all the resources/tools I use are resident on the device I am using. • I am beginning to show an understanding of URLs.	• I can Share ICT work I have done electronically by school blog or uploading to authorised sites. • I can comment on others' work. • I show an awareness of where passwords are critical in everyday use (e.g. parents accessing bank details) • I show an understanding that my password is the key to accessing a personalised set of resources and files (e.g. My Documents). • I can perform a search using different search engines and check the results against each other, explaining why they might be different. • I show an awareness of the need for accuracy in spelling and syntax to search effectively.
Handling Data	• I am beginning to use a simple pictogram or painting program to develop simple graphical awareness / one to one correspondence. (J2E)	• I can use a graphing package to collect, organise and classify data, selecting appropriate tools to create a graph and answer questions. • I can enter information into a simple branching database, database or word processor and use it to answer questions. • I can save, retrieve and edit my work.	• I can use a simple database (the structure of which has been set up for me) to enter and save and save information on a given subject. • I can follow straight forward lines of enquiry to search through data for my own purposes. • I can talk about my experiences of using ICT to process data compared with other methods. I am beginning to use a data logger to sense physical data (sound, light, temperature).	• I can talk about my experiences of using ICT to process data compared with other methods. • I can enter information and interrogate it (by searching, sorting, graphing etc). • I am beginning to reflect on how useful the collected data and my interrogation was and whether or not my questions were answered. • I can use a data logger confidently, connected to the computer or remotely, to capture continuous or intermittent data readings • I can interpret the results and use these in my investigations.