IT Knowledge skills and Capability Year 3

POS / Skill / Capability / Concepts / Knowledge Key skills / Objectives (DL)	POS / Skill / Capability / Concepts / Knowledge Key skills / Objectives (DS)	POS / Skill / Capability / Concepts / Knowledge Key skills / Objectives (SRU)
• Understand the purpose of and use independently a range of different technology becoming familiar with a range of devices, for example tablets, desktop computers, laptops, microphones, cameras etc. **Increasingly develop their independence and confidence in using these devices.** • To continue to develop typing speed and accuracy to develop competency in typing. • Take opportunities to make sensible choices about when to use technology, which piece(s) of technology to use, which software/tools they are going to use on the technology and be able to explain their choices to others. • Continue to word process a range of work in other curriculum areas, using more advanced word processing features such as columns and borders, text alignment and text wrapping. • Recognise the key features of different layouts and consider how to meet the needs of the audience e.g. poster, newspaper, menu, instructions, presentations etc • Understand that evaluation and improvement is a vital part of a design process and that ICT allows changes to be made quickly and efficiently. Demonstrate through editing their work. • Work together to collaboratively produce a presentation using cloud /web2 based tools. • Begin to realise that the information they put online leaves a digital footprint or trail and this needs to be managed. (e-mail, wiki, blog) • Understand the differences between a word processor and desktop publishing tools and use desk top publishing tools to create posters, leaflets and	• Use a range of child friendly search engines to locate different media, e.g. text, images, sounds or videos. • Evaluate different search engines and explain their choices in using these for different purposes. • Know when they are using the Internet and when they are using resources that are stored on their school network or on their personal device. • Recognise where they can save work on the public drive in school and on the Internet. • Begin to identify appropriate places to collaborate and communicate on the Internet and the importance of doing so responsibly. • Make safe choices when using the internet and know what to do if they see something inappropriate on the internet according to school's e-safety policy.	• Know and follow the school's safer internet rules. • Be able to question the "validity" of what they see on the internet that it may not be accurate or reliable and may be used for bias, manipulation or persuasion. • Use a browser address bar not just search box and shortcuts. • Understand the need for rules to keep them safe when exchanging learning and ideas online. • Recognise the difference between copying the work of others (plagiarism) and re-presenting materials which are new. • Think before sending and suggest consequences of sending/posting. • Recognise online behaviour that would be unfair and how to report this.

other documents which require specific formatting. Add information about the author and title for publishing. • Create a new eBook with a front cover and add or remove pages. Combine text and images within each page and embed sound clips.		
POS / Skill / Capability / Concepts / Knowledge Key skills / Objectives (MM)	**POS / Skill / Capability / Concepts / Knowledge Key skills / Objectives (P/C/I)**	**POS / Skill / Capability / Concepts / Knowledge Key skills / Objectives (UD)**
Multimedia • Recognise the key features of different layouts and consider why the layouts help to meet the needs of the audience(e.g. poster, newspaper, menu, instructions) • Begin to understand that evaluation and improvement is a vital part of a design process and that ICT allows changes to be made quickly and efficiently. Demonstrate through editing their work. • Recognise that ICT can support spelling and talk about the advantages and disadvantages of this. • Compare the different contributions of text from a variety of electronic sources. • Begin to recognise the features of good page design and multimedia presentations. • Develop increasing sense of audience and purpose **Digital Imagery** • Understand that a digital image can be captured from a number of different devices and that it can be enhanced. • To begin to understand how images from different sources (stills, video, graphics, animation) are used to enhance a presentation or communicate an idea • Understand the importance of editing and improving designs.	• Use the term 'algorithm' when referring to the instructions and component parts of commands and procedures. • Compare and discuss these recognising that algorithms are developed according to a plan and then tested. • Experiment with variables when controlling devices • Use 45, 90, 180 and 360 degree turns in procedures. On and off screen. • Plan, create, test and modify sequences of commands to solve open ended problems using an on screen floor robot, screen turtle or other programmable devices. • Use more advanced Logo programming, including pen up/pen down and repeat commands to create patterns. Test, modify and refine sequences, e.g., symmetric and repeating geometric patterns. • use repeat to achieve solutions to tasks • Use and edit a pre-written procedure • Create simple flow diagrams or pictorial sequences of commands using appropriate tools/software to explain and expand their ideas. • Begin to type logo commands to achieve outcomes • Write more complex programs and test them.	• Build on skills using technology to create graphs and charts, recognise which information is suitable for their topic • Understand what a database is, and the need to structure information properly • Understand the advantages of using ICT to sort, interrogate and classify information quickly • Create graphs from pre-made databases, and enter their own data into a database • Generate graphs using these and answer questions by constructing basic queries. • Develop skills to know which data needs to be collected and design a questionnaire to aid its collection. • Collect appropriate information, enter it into a database and use the database to answer simple questions • With support create files and folders to store and retrieve data. • Know that data loggers can be used when connected to a computer and also remotely. • With support choose the appropriate sensors to capture and record data in the course of an investigation.

• Understand the need for caution when using the internet to search for images and what they should do if they find images that upset them. (See school's Acceptable Internet Usage Policy). • Understand that film conveys meaning **Sound and Music** • Talk about software which allows easy manipulation and creation of sound and music • Begin to understand that copyright exists on most recorded music • Understand that all types of sounds can be combined in editing software.	• Introduce sensors (temperature, light, sound etc) which can be used to 'trigger' actions. • Explore and create simple platform games knowing the steps needed to create them. Evaluate saying what could be improved. • Enter data into a simple computer simulation • Talk about when a simulation may be useful, the options and choices. • Make predictions about what will happen.	