Subject		Skills and Objectives
Computing		
Year 3	**Using a computer** Working above: Working below:	**To continue to develop typing speed and accuracy to develop competency in typing** **To understand the purpose of and use independently a range of different technology.** **To make 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.** • Throughout KS2 children should:- • Continue to become familiar with a range of devices, for example tablets, desktop computers, laptops, microphones, cameras etc and increasingly develop their independence and confidence in using these devices. • Continue to increase their typing speed, and be encouraged to play games at home and school which help with this. • Aim to reach the accepted competency rate for children of 20WPM by the end of Year 4. • Be encouraged to increasingly make sensible choices about the technology they use to help them work, and to justify their choices- for example, why they have chosen to use a tablet rather than a laptop, or why they have chosen to use an easi-speak microphone rather than the computer to record sound.
	Using the Internet Working above: Working below:	**To follow a simple search to find specific information from a web site** **To find and use appropriate information** **To identify how different web pages are organised e.g. graphics, hyperlinks, text** **To navigate a web page to locate specific information** **To know that ICT enables access to a wider range of information and tools to help find specific information quickly.** **To understand a website has a unique address.** • Develop key questions to search for specific information with purpose to answer a problem e.g. to find out about different Roman Gods. • Understand how a search engine works and begin to create and enter appropriate search strings. • Save and retrieve accessed information through the use of Favourites, History, and Save As. • Understand that some information found through searching is more relevant than others. • Use the information purposefully to complete specific tasks e.g. copy, paste and edit relevant information (ref. creating and publishing unit) • Talk about and describe the process of finding specific information
	Communicating and collaborating online Working above: Working below:	**To understand that Cloud based tools can allow multiple people to contribute to shared documents and Google Sites** • Begin to use on-line tools, such as Google docs and sites to collaborate together- for example by working together to add ideas to a word bank, write a shared story.To start to understand that messages can be sent electronically over distances.
	Creating and Publishing Working above:	**To continue to produce work using a computer, using more advanced features of programs and tools.** **To work collaboratively together to create documents, including presentations.** **To use desk top publishing tools effectively and understand the differences between a word processor and desk top publisher** • Continue to word process a range of work in other curriculum areas, using more advanced word processing features such as columns and borders. • Work together to collaboratively produce a presentation using cloud based tools.

		Working below:	• Understand the differences between a word processor and desktop publishing tools and use desk top publishing tools to create posters, leaflets and other documents which require specific formatting.
	Digital media Working above: Working below:		To understand they can compose music using icons to represent musical phrases To understand ICT allows easy creation, manipulation and change To know they can record sound using ICT that can be stored and played back and independently using a range of tools to record sound. To independently record video using a range of devices and for a range of purposes. To independently take photographs taking into account the audience and/or purpose for the image. To create digital artefacts using photographs which they have taken or found. To edit photographs using a range of basic tools. • Use a computer to sequence short pieces of music using a small selection of pre-record sounds. • Independently record video for a range of purpose, paying attention to the quality of the video capture. • Take photographs for a specific reason or project and/or find appropriate images on-line. • Create a video out of still images. • Use the computer to preform photo edits and create a range of digital creations using photos
	Programming and control Working above: Working below:		To continue to develop their understanding of how computer and technology works and how computers process instructions and commands. To create, edit and refine more complex sequences of instructions for a variety of programmable devices. To use a computer to create basic applications, investigating how different variables can be changed and the effect this has. • Continue to develop understanding of how a computer and technology works, focusing on computational thinking. • Begin to plan more complex sequences of instructions for on-screen and floor turtles test and amend these instructions. (e.g. using RoboMind) • Use software to make basic puzzles and quizzes, changing parameters (e..g time allowed, points, number of pieces etc) to customise the puzzle or quiz (e.g. 2DIY)
	Modelling and simulation Working above: Working below:		To use a range of increasingly simulations to represent real life situations. Use simulations to make and test predictions. • Continue to explore simulations as appropriate and as link with other curriculum areas and discuss the benefits of using these simulations • Use simulations to make and test predictions.
	Using Data Working above: Working below:		To understand the basic structure of a database. To be able to add data to a pre-made database. To use the data in a pre-made database to generate graphs and charts. To use technology to create graphs and charts. • Continue to use technology to create graphs and charts. • Understand which a database is, and the basic structure of a database. • Create graphs from pre-made databases, and enter their own data into a database and generate graphs using these. Use other software to present these findings as appropriate.