

St Michael's Nursery and Infant School - Computing Skills Progression - Reception – Year 2

Computing is split into 5 different categories: **E-Safety**, **Programming**, **Multimedia**, **Technology in Our Lives** and **Data Handling**. Below is the progression of skills that children should learn from Reception until they leave us in Year 2.

E-Safety - Reception	E-Safety - Year 1	E-Safety - Year 2
Talk about good & bad choices in real life e.g. taking turns, saying kind things, helping others, telling an adult if something upsets you	Understand they need to follow certain rules to remain safe when visiting places online	Stay safe online by choosing websites that are good for them to visit & not inappropriate sites
Play appropriate games on the Internet	Begin to understand that if you create something you own it	Explore what cyber-bullying means & what to do when they encounter it
Talk about good and bad choices when using websites - being kind, telling a grown up if something upsets us & keeping ourselves safe by keeping information private	Learn that many websites ask for information that is private & discuss how to responsibly handle such requests	Know that if they put information online it leaves a digital footprint or "trail" & they need to manage it so it's not hurtful
	Explore how email can be used to communicate with real people within their schools, families & communities	Understand that keyword searching is an effective way to locate online information & how to select keywords to produce the best search results
	Learn that directory sites with alphabetical listings offer one way to find things on the Internet	Discuss criteria for rating informational websites a site.
		Realise that not all websites are equally good sources of information

Programming - Reception	Programming - Year 1	Programming - Year 2
Help adults operate equipment around the school, independently operating simple equipment	Physically follow & give each other instructions to move around	Physically follow and give each other forward, backward & turn (right-angle) instructions
Use simple software to make things happen	Explore outcomes when buttons are pressed in sequences on a robot	Articulate an algorithm to achieve a purpose
Press buttons on a floor robot and talk about the movements	Begin to use software to create movement & patterns on a screen	Plan and enter a sequence of instructions to achieve an algorithm, with a robot specifying distance & turn and drawing a trail
Explore options and make choices with toys, software and websites	Begin to identify an algorithm to achieve a specific purpose	Explore outcomes when giving instructions in a simple Logo program
	Execute a program on a floor robot to achieve an algorithm	Watch a Logo program execute & debug any problems
	Use the word debug to correct any mistakes when programming a floor robot	Predict what will happen & test results
	Begin to predict what will happen for a short sequence of instructions in a program	Talk about similarities & differences between floor robots and logo on screen

Multimedia - Reception	Multimedia - Year 1	Multimedia - Year 2
Use a mouse to rearrange objects and pictures on a screen	Record their own voices and play back to an audience	Use an increasing variety of tools and effects in paint programs and talk about their choices
Recognise text, images and sound when using ICT	Use a video or stills camera to record an activity	Use templates to make electronic books individually and in pairs
Use a camera or sound recorder to collect photos or sound	Create sounds and simple music phrases using ICT tools	Explore the effects of sound and music in animation and video
Use paint programs to create pictures	Add text and images to a template document using an image & word bank	Create own documents, adding text and images
Begin to use a keyboard see programming	Use index fingers (left and right hand) on a keyboard to build words & sentences	Use keyboard to enter text (index fingers left & right hand)
Develop an interest in ICT by using age appropriate websites or programs	Know when & how to use the SPACE BAR (thumbs) to make spaces between words	Know when and how to use the RETURN/ ENTER key. Use SHIFT & CAPS LOCK to enter capital letters. Use DELETE & BACKSPACE buttons to correct text. Create sentences, SAVE & edit later

TiOL - Reception	TiOL - Year 1	TiOL - Year 2
Recognise purposes for using technology in school and at home	Recognise uses of technology in their homes and in their community	Begin to understand there are a variety of sources of information and begin to recognise the differences
Understand that things they create belong to them and can be shared with others using technology	Understand that there are online tools that can help them create and communicate	Begin to understand what the Internet is and the purposes that it is used for
Recognise that they can use the Internet to play and learn		Understand the different types of content on websites and that some things may not be true or accurate

Data Handling - Reception	Data Handling - Year 1	Data Handling - Year 2
Collect information as photos or sound files	Take photographs, video and record sound to record learning experiences	Take and save photographs, video & record sound to capture learning
Use a simple pictogram or set of photos to count and organise information	Look at how data is representing digitally	Use microscopes or other devices to capture and save magnified images
	Contribute to and interpret a pictogram	Ask questions and consider how they will collect information
		Collect data, generate graphs and charts to find answers
		Save & retrieve the data to show to others
		Create paper/ object decision trees & explore a branching database
		Investigate different types of digital data e.g. online encyclopaedias