Stalyhill Infant School – Long term curriculum plan

Computing

Intent: To provide children with the skills and knowledge to safely access, use and learn through the use of technology and to begin to develop digital literacy for a life in today's ever changing technological world.

	Reception
Technology	• I can operate simple equipment, e.g. turn on a CD player and use a remote control. • I can show an interest in technological toys with buttons or pulleys, or real objects such as cameras or mobile phones. • I can show skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movement or new images. • I can demonstrate that I know that information can be retrieved from computers. • I can complete a simple program on a computer. • I can use ICT hardware to interact with age-appropriate computer software.
Goal	• **I can recognise that a range of technology is used in places such as homes and schools.** • **I can select and use technology for particular purposes.**

	Year 1	Year 2
Algorithms and programming	• I can create a series of instructions. • I can plan a journey for a programmable toy.	• I can use a range of instructions (e.g. direction, angles, turns). • I can test and amend a set of instructions. • I can find errors and amend. (debug) • I can write a simple program and test it. • I can predict what the outcome of a simple program will be (logical reasoning). • I understand that algorithms are used on digital devices. • I understand that programs require precise instructions.
Information Technology	• I can create digital content. • I can store digital content. • I can retrieve digital content. • I can use a web site. • I can use a camera. • I can record sound and play back.	• I can organise digital content. • I can retrieve and manipulate digital content. • I can navigate the web to complete simple searches.
Digital Literacy	• I can use technology safely. • I can keep personal information private.	• I use technology respectfully. • I know where to go for help if I am concerned. • I know how technology is used in school and outside of school.

Knowledge, Skills and Understanding for Computing

	Year 1	Year 1 challenging	Year 2	Year 2 challenging
Algorithms and programmes	• Can they create a simple series of instructions - left and right? • Can they record their routes? • Do they understand forwards, backwards, up and down? • Can they put two instructions together to control a programmable toy? • Can they begin to plan and test a Bee-bot journey?	• Can they record pupils' voices as a voice over • Can they use a teacher prepared photo story to create a slideshow of photos?	• Can they predict the outcomes of a set of instructions? • Can they use right angle turns? • Can they use the repeat commands? • Can they test and amend a set of instructions? • Can they write a simple program and test it? • Can they predict what the outcome of a simple program will be?	• Can they create a presentation in a small group and record the narration? • Can they record sounds into software and playback? • Can they insert prerecorded sounds into a presentation? • Can they capture still and moving images?
Data retrieving and organising	• Can they capture images with a camera? • Can they print out a photograph from a camera with help? • Can they record a sound and play it back? • Can they enter information into a template to make a graph? • Can they talk about the results shown on a graph?		• Can they find information on a website? • Can they click links in a website? • Can they print a web page to use as a resource? • Can they experiment with text, pictures and animation to make a simple slide show? • Can they use the shape tools to draw?	
Communicating	• Do they recognise what an email address looks like? • Have they joined in sending a class email? • Can they use the @ key and type an email address? • Can they word process ideas using a keyboard? • Can they use the spacebar, back space, enter, shift and arrow keys? • Can they print out a page from the internet?		• Can they send and reply to messages sent by a safe email partner (within school)? • Can they word process a piece of text? • Can they insert/delete a word using the mouse and arrow keys? • Can they highlight text to change its format (B, U, I)?	

E Safety at KS1	
Knowledge and Understanding	**Skills**
• Can they understand the different methods of communication (e.g. email, online forums etc)? • Do they know you should only open email from a known source? • Do they know the difference between email and communication systems such as blogs and wikis? • Do they know that websites sometimes include pop-ups that take them away from the main site? • Do they know that bookmarking is a way to find safe sites again quickly? • Can they begin to evaluate websites and know that everything on the internet is not true? • Do they know that it is not always possible to copy some text and pictures from the internet? • Do they know that personal information should not be shared online? • Do they know they must tell a trusted adult immediately if anyone tries to meet them via the internet?	• Can they follow the school's safer internet rules? • Can they use the search engines agreed by the school? • Can they act if they find something inappropriate online or something they are unsure of (including identifying people who can help; minimising screen; online reporting using school system etc)? • Can they use the internet for learning and communicating with others, making choices when navigating through sites? • Can they send and receive email as a class? • Can they recognise advertising on websites and learn to ignore it? • Can they use a password to access the secure network?