

Senacre Wood Primary- Computing Skills Progression

EYFS Areas of Study

Understanding the World: Technology

ELG: Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

- Skills progression: Pupils begin the year by learning basic computer skills- mouse control, turning toys on and off and selecting games and apps using the computer/Ipad. They are also given opportunities, throughout the year, to discuss how the internet can be used to find out information. By the end of the year, pupils are expected to recognise letters on the keyboard and use this to write their name.

National Curriculum Aim		Y1	Y2	Y3	Y4	Y5	Y6
Generic Skills	Are responsible, competent, confident and creative users of information and communication technology	<i>KS1 NC Link: use technology purposefully to create, organise, store, manipulate and retrieve digital content</i>		<i>KS2 NC Link select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i>			
		With support, I can load programs. With support I can save and retrieve work. I can use the keyboard to enter short captions.	I can print work using the print icon. I can save and retrieve work. I can use the keyboard to add, delete and space text for others to read.	I can practise keyboard skills using both hands and my thumb on the space bar. I can print work using the drop down menu. I can use cut, copy and paste. I can use appropriate keyboard commands and shortcuts.	I can create and name new folders. I can develop my keyboard skills using two hands. I can use print preview. I can change the page setup.	I can use find, search and replace. I can practise using my word processing skills in a range of contexts.	I can use my word processing skills in a range of contexts.
E-Safety		<i>KS1 NC Link: Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</i>		<i>KS2 NC Link: Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i>			
		I can tell you what personal information is. I can keep my password private. I can tell an adult when I see something worrying or unexpected online. I can talk about why it's important to be kind and polite.	I can explain why I need to keep my personal information and password private. I Know what to do and who to tell if I see something inappropriate online I can explain why it is important to be kind and polite online. I can recognise age appropriate websites.	I can talk about what makes a secure password and why they are important. I can discuss what actions could be taken if I am uncomfortable or upset online <i>e.g. Report Abuse button.</i> I can give examples of 'good' and 'bad' behaviour online. I can make judgments in order to stay safe, whilst communicating with others online. I know that not everyone online is who they say they are. I can choose age appropriate websites. I can make good choices about the amount of time I spend online.	I can choose a secure password when I am using a website. I can describe, in detail, what is good behaviour online. I know that anything I post online can be seen by others. I can discuss the importance of keeping an adult informed about what you're doing online, and how to report concerns. I can help my friends make good choices about the amount of time I spend online.	I know how to respond if asked for personal details or in the event of receiving unpleasant communications. I can identify dangers when presented with scenarios and explain how to respond to them. <i>E.g. social networking profile</i> I can be a good online citizen. I can discuss my own personal use of the Internet and choices I make. I can discuss the dangers of spending too much time online.	I can judge what sort of privacy settings might be relevant to reduce different risks I can discuss scenarios involving online risk and how to respond to them. I recognise that cyber bullying is unacceptable and I know strategies for dealing with it. I can find report and flag buttons in commonly used sites and name sources of help. I can explain the consequences of spending too much time online or on a game.

Technology in our lives	Are responsible, competent, confident and creative users of information and communication technology	<i>KS1 NC Link:</i> <i>recognise common uses of information technology beyond school</i>		<i>KS2 NC Link:</i> <i>understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration</i>					
		I can recognise ways technology is used in my classroom, home and community. I can describe some of the benefits of using technology. I can use links to websites.	I can talk about the differences between the internet and the physical world. I can tell you why I use technology in the classroom . I can use links to websites to find information	I can save and retrieve work on the school network. I can tell you ways to communicate with others online. I can describe the World Wide Web as the part of the internet that contains websites.	I can tell you whether a resource I am using is on the internet, school network or my own device. I can create a hyperlink.	I can describe different parts of the internet. I can use different online communication tools	I can describe how information is transported on the internet. I can select an appropriate tool to communicate and collaborate online.		
		<i>KS2 NC Link:</i> <i>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</i>						I can use search tools to find and use appropriate websites.	I can use a search engine to find appropriate information and check its reliability.
Programming	can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems	<i>KS1 NC Link:</i> <ul style="list-style-type: none"> <i>understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</i> <i>Create and debug simple programs</i> <i>Use logical reasoning to predict the behaviour of simple programs</i> 		<i>KS2 NC Link:</i> <ul style="list-style-type: none"> <i>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i> <i>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i> <i>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i> 					
		BEEBOT (Building on EYFS) I can give instructions to my friend to make them move. I can describe what happens when I press buttons on a programmable toy. I can describe what I think will happen. I can programme a robot to reach a location. I can use the word 'debug' when I correct mistakes when I program.	BEEBOT + PROBOT (Developing commands/problem solving) I can tell you the order I need to do things to make something happen and I know this is an algorithm. I can program a robot or software to do a particular task. I can describe what I think will happen, giving reasons. I can watch a program execute and spot where it goes wrong so that I can debug it.	SCRATCH JNR (onscreen programming) I can put programmable commands into a sequence to achieve a specific outcome. I can test my programme and recognise when I need to debug it. I can use repeat commands. I can describe the algorithm I will need for a simple task.	SCRATCH (Developing on the use of Scratch Jnr) I can break an open ended problem into smaller chunks. I can use a variety of tools to create a programme. I can recognise an error and debug it. I can use an efficient procedure to simplify a programme.	LOGO (linked with mathematical curriculum) I can decompose a problem into smaller steps to design an algorithm for a specific outcome and use this to write a program. I can refine a programme using repeat commands to improve a program. I can use logical reasoning to detect and debug a program.	MICROBIT (Secondary ready- application of all programming skills acquired so far) I can evaluate the effectiveness and efficiency of my algorithm while I continuously test it. I can use a variable to increase programming possibilities.		

Multimedia	can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems	<i>KS1 NC Link: use technology purposefully to create, organise, store, manipulate and retrieve digital content</i>		<i>KS2 NC Link: select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of...content that accomplish given goals, including...presenting data and information</i>			
		<p>I can draw a picture in paint.</p> <p>I can use a camera to take a picture.</p> <p>I can add captions.</p> <p>I can record sound using talking tins.</p>	<p>I can independently and appropriately use various tools in paint.</p> <p>I can capture video for a purpose.</p> <p>I can add simple titles and credits.</p> <p>I can use word to organise and present my ideas.</p>	<p>I can insert clipart.</p> <p>I can combine images from a camera and the internet for a purpose.</p> <p>I can resize and rotate an image.</p> <p>I can select text and change the font, size and colour.</p> <p>I can combine a mixture of text, graphics and sound to share my ideas and learning.</p> <p>I can evaluate my work and improve its effectiveness.</p>	<p>I can insert a table.</p> <p>I can effectively use word art.</p> <p>I can use a range of media to design and create a presentation.</p> <p>I can give constructive feedback to my peers.</p> <p>I can record and edit sound on a computer. (Linked with science)</p>	<p>I can use the print screen function to capture an image.</p> <p>I can plan a layout or presentation to suit an audience.</p> <p>I can create and redraft work combining text, graphics and sound.</p> <p>I can create a non-linear presentation.</p> <p>I can insert hyperlinks.</p> <p>I can split, merge, insert and delete cells in a table.</p> <p>I can capture video for a purpose</p>	<p>I can talk about audience, atmosphere and structure when planning a particular outcome.</p> <p>I can combine a range of media, recognising the contribution of each to achieve a particular outcome.</p> <p>I can use rehearse timings before presenting to an audience.</p> <p>I can create an animation.</p>
Handling Data	can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation	<i>KS1 NC Link: use technology purposefully to create, organise, store, manipulate and retrieve digital content</i>		<i>KS2 NC Link: select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of...content that accomplish given goals, including collecting, analysing, evaluating and presenting data...</i>			
	can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems	<p>I can use technology to collect information e.g. photos.</p> <p>With support, I can add information to a pictograph and talk about what I have found out.</p>	<p>I can tell you what information I could use to help me investigate a question.</p> <p>I can make and save a block chart or bar graph using the data I collect.</p>	<p>I can collect information using a questionnaire.</p> <p>With support, I can create graphs from the data.</p>	<p>I can present data in different ways e.g. graphs and tables.</p> <p>I can use a spreadsheet to record data.</p>	<p>I can choose an appropriate way to collect data.</p> <p>I can use a simple formula.</p> <p>I can talk about mistakes in data and suggest how it can be checked.</p>	<p>I can plan the process needed to investigate the world around me.</p> <p>I can use formulae and functions in a spreadsheet.</p> <p>I can make graphs from my calculations on spreadsheets.</p> <p>I can choose appropriate ways to present data.</p> <p>I can check the data I collect for accuracy and plausibility.</p>