

Highfield Community Primary Overview of Computing Scheme of Work

Year	Digital Citizenship E safety	Programming and control Coding	Technology to connect <small>Communicating and collaborating on line</small>	Using the internet	Digital Literacy Creating and Publishing	Digital Media Creating animations	Handling Data	Modelling and Simulations.
R	SWGFL Going places safely.	Understand that devices respond to commands. (remote control toys)	Recognise common uses of information technology beyond school. .	To know buttons/icons can represent different functions e.g. record, pause, play (every day technology)	<i>To use technology to combine text with drawings.</i>	To know they can explore sound and music using technology and that they can create sound using computer programs. (2simple music toolkit)	To identify a group of objects that can be sorted.	To understand computers can help us to make decisions.
1	SWGFL Going places safely. Keep it private Sending e mail	Understand that devices respond to commands.	To start to understand that messages can be sent electronically over distances.	To understand that information comes from different sources e.g. books, web sites, TV etc To talk about their use of ICT and the Internet, and other methods to find information.	<i>To become more confident in their use of technology to combine text with photographs, graphics and drawings.</i>	To know they can explore sound and music using technology and that they can create sound using computer programs. To take photographs for a range of different purposes.	To use technology to begin to organise items and create graphs and pictograms, recognising there is a link between data collected and the information presented on screen.	To understand computers can represent real or fantasy situations

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2	<p>SWGFL Staying safe on line. Cyber Bullying.</p>	<p>To create, edit and refine sequences of instructions for a variety of programmable devices.</p>	<p>To start to understand that messages can be sent electronically over distances. To understand that email can be used to send messages electronically and people can reply to emails.</p>	<p>To begin to develop key questions and find information to answer them. To recognise the layout of a web page, recognise web addresses, menu buttons and links. To recognise the need to use search tools and search engines to begin to find information on the internet.</p>	<p><i>To use technology to word process and present work, making use of common features of word processing tools. (change font, size, colour, spacing etc)</i></p>	<p>To know they can explore sound and music in ICT using onscreen music software To independently record video and sound using a range of tools. To take photographs for a range of different purposes.</p>	<p>To use technology to create graphs and amend created graphs. To begin to create their own branching databases using ICT.</p>	<p>To use a range of basic simulations to represent real life situations and explore the effects of changing variables and the benefits of using the simulations.</p>
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3	<p>SWGFL Online community. Passwords.</p>	<p>To create, edit and refine more complex sequences of instructions for a variety of programmable devices. Create scripted animations in Scratch, moving characters around the screen.</p>	<p>To understand that Cloud based tools can allow multiple people to contribute to shared documents and Google Sites.</p> <p><i>Sharing Information</i> Forums VLP E mail</p>	<p>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</p>	<p><i>Continue to word process a range of work in other curriculum areas, using more advanced word processing features.</i> To work collaboratively together to create documents, including presentations.</p>	<p>To create a storyboard/ plan for a film. Independently record video using a range of devices and for a range of purposes. (Stop Motion Graphic Animation)</p>	<p>To understand the basic structure of a database. To use the data in a pre-made database to generate graphs and charts. To use technology to create graphs and charts.</p>	<p>To use a range of increasingly more complex simulations to represent real life situations.</p>
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4	<p>SWGFL Responsible and respectful communication. Protecting personal information. Effective keyword searches.</p>	<p><i>To create, edit and refine more complex sequences of instructions for a variety of programmable devices (2014-15 only)</i> Simple maze games and quizzes in Scratch</p>	<p>To begin to understand how computer networks and the internet work and how they provide multiple services. To understand the opportunities they offer for communication and collaboration. To understand how e-mails work and be able to send an e-mail, including choosing a suitable subject and entering addresses in the 'to', 'cc' and 'bcc' fields. <i>Sharing Information Forums</i> VLP</p>	<p>To use keywords to find relevant information e.g. What did Egyptians eat? To understand the dynamics of a search engine and know that there are different search engines (some within specific sites e.g. BBC, and some the whole of the Internet e.g. Google, Yahoo, Ask Jeeves) To be able to skim read and sift information to check its relevance and modify their search strategies if necessary.</p>	<p>To create a website, giving thought to its audience and including links, images and embedded media and documents. To understand that evaluation and improvement is a vital part of a design process and ICT allows changes to be made quickly and efficiently. <i>Continue to develop presentational skills choosing appropriate layout and format for intended audience.</i></p>	<p>To create basic stop motion animations. Independently record video using a range of devices and for a range of purposes. Create soundscapes.</p>	<p>To continue to use technology, including spreadsheets to create graphs and present data in different ways. To be able to design and create a basic database. To use a database to answer questions by constructing queries.</p>	<p>To understand that ICT allows for situations to be modelled, especially those for which it would be impractical to try out in real life and to investigate the effect of changing variables in these simulations.</p>
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5	<p>SWGFL Protecting personal information. Research and respecting sources. Picture perfect.</p>	<p>To use assisted programing software to create basic software which interacts with external controllers, and elements on screen, creating algorithms and using logic and calculations. Text based adventure games in Scratch. Games for a younger audience</p>	<p>To share and exchange their ideas using e-mail and electronic communication- inside the school environment. To use collaboration tools to work together to produce a joint piece of work. <i>Sharing Information</i> Forums VLP Wiki's</p>	<p>To use a range of sources to check validity and recognise different viewpoints and the impact of incorrect data To save and use pictures, text and sound and be able to import into a document for presentation (multimedia presentation) To recognise that the Internet may contain material that is irrelevant, bias, implausible and inappropriate To understand the issues of copyright and how they apply to their own work.</p>	<p>To create websites for a specific purpose and improve these sites. <i>To use technology to help them present their work, showing an increasing degree of skill and using advanced features of software and tools.</i> <i>To select tools which they can use to help them achieve a specific aim and justify these choices to others</i></p>	<p>To use technology to capture and edit video, applying a range of different effects and incorporating numerous video clips. Stop Motion Animation/Creating film documentary.</p>	<p>To continue to use, search and enter data into databases. To create their own databases. To continue to use technology, including spreadsheets to create graphs and present data in different ways.</p>	<p>To understand that ICT allows for situations to be modelled, especially those for which it would be impractical to try out in real life and to investigate the effect of changing variables in these simulations.</p>
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6	<p>SWGFL</p> <p>Online safety. Protecting private information. C'bullying. Stereotypes.</p>	<p><i>To use assisted programming software to create basic software which interacts with external controllers, and elements on screen, creating algorithms and using logic and calculations. (2014-15 only)</i></p> <p>Develop multi level games in Scratch.</p>	<p>To use appropriate forms of communication to, share information or ideas.</p> <p>To use collaboration tools to work together to produce a joint piece of work with children both inside Highfield Primary and in other schools.</p> <p><i>(e safety paramount)</i></p> <p>Sharing Information Forums VLP Wiki's</p>	<p>To check the plausibility of information from a variety of sources on the same topic</p> <p>To use a range of sources to check validity and recognise different viewpoints and the impact of incorrect data</p> <p>To understand plagiarism and the importance of acknowledging sources</p>	<p>To create websites for a specific purpose and improve these sites.</p> <p><i>To use technology to help them present their work, showing an increasing degree of skill and using advanced features of software and tools.</i></p> <p><i>To select tools which they can use to help them achieve a specific aim and justify these choices to others.</i></p> <p>Understand the importance of evaluation and adaptation of individual features to enhance the overall product.</p>	<p>To use technology to create stop motion animations and add audio and video effects to these animations.</p> <p>To use a computer to add complex effects to photographs and to perform common photograph edits (e.g. red eye removal)</p>	<p>To continue to enter data into a database and create their own databases.</p> <p>To continue to use technology, including spreadsheets to create graphs and present data in different ways.</p> <p>To be able to design, construct, evaluate and modify simple models i.e. enter data, enter formulae, copy cells and use simple formatting in a spreadsheet.</p> <p>To use a spreadsheet to draw a graph to show data</p> <p>To understand</p>	<p>To understand that ICT allows for situations to be modelled, especially those for which it would be impractical to try out in real life and to investigate the effect of changing variables in these simulations.</p>
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							that ICT allows quick and easy changes to be made to different variables once a spreadsheet is set up.	
	<p><i>SWGFL provides the base for our e safety curriculum. E safety is reinforced across all aspects of the computing curriculum.</i></p>				<p><i>Digital Literacy includes the use of word processing and presentation. These are basic skills that still need to be taught across the curriculum and year groups.</i></p>			

These are Medium Term plans and should form the basis of your ICT planning: It is intended that units are not taught in isolation but key areas and skills are taught throughout the year as appropriate with other units and in a cross curricular context. You may want to highlight the schemes as aspects are covered to ensure you have coverage. One to two hour sessions in the ICT suite each week will focus on skills development and will provide experiences which can then be applied in other work.

Using technology is a key objective and skill across both key stages. More detail is given in each year groups' overview.