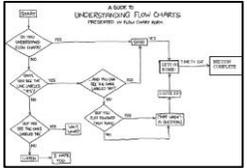


Year 5- ICT Curriculum.

Learning Objectives	Key Skills	Notes
Using technology		
<ul style="list-style-type: none"> • 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. 	<p>Throughout KS2 children should:-</p> <ul style="list-style-type: none"> • 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. • 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 <i>tablet</i> rather than a laptop, or why they have chosen to use an <i>easi-speak</i> microphone rather than the computer to record sound. 	<p><i>Just like handwriting, it is important that children type themselves when using a computer- no matter how slow they may be!</i></p> <p>Typing speed refers to copying WPM, composition WPM will be slower.</p> <p>See 'tools for teaching typing' for software and websites to use. Google search http://10fastfingers.com/typing-test/english</p>
Using the Internet		
<ul style="list-style-type: none"> • 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 (ref. 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 	<ul style="list-style-type: none"> • Discuss different strategies for finding relevant information e.g. using different keywords to find information on a given enquiry • Use a range of keywords to find different sources of information and enter them into a chosen search engine • Modify searches further to find relevant information for a report • Select and combine information from a range of different sources and present their findings using a word processing or multimedia/publishing package for a specific audience • Be aware that web sites are not always accurate and that information should be checked before it is used. 	<p>Research for inquiry science.</p> <p>E-safety sessions</p>

	<ul style="list-style-type: none"> Discuss issues of copyright and downloading material e.g. mp3s, images, videos etc. Find images which are creative common licenced and understand the importance of stating their sources. 	
Communicating and collaborating online		
<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Continue to use e-mail to e-mail within <i>West Earlham</i> and to e-mail work completed in and out of school to their teachers and peers. Collaborate on a project using a range of web 2.0 tools to support their work- including, but not limited to , goggle documents and sites (within the <i>West Earlham</i> domain) Begin to collaborate with other children outside of <i>West Earlham</i> (e-safety paramount) Upload files to an online area e.g. video, photo story, sounds, images 	<p>All delivered as part as general curriculum.</p> <p>Emails to begin. Link to google documents</p>
Creating and Publishing		
<ul style="list-style-type: none"> To create non-traditional presentations using a range of tools, for a specific purpose To create websites for a specific purpose and improve these sites. To use technology to help them present their work, showing an increasing degree of skill and using advanced features of software and tools. To select tools which they can use to help them achieve a specific aim and justify these choices to others. 	<ul style="list-style-type: none"> Use an alternative presentation tool (for example <i>Prezi</i> or <i>Ahead</i>) to create a presentation linking into a topic, area of interest or event. Continue to create websites based on topics, area of interest or events, increasing the complexity of these sites. Continue to regularly use word processing and desktop publishing to present their work, combing formatted text with other media and making choices about programs and features to use and justifying these choices to others. Continue to use ICT to create a finished product or set of linked products, developing consistency in style across linked products. 	
Digital Media		
<ul style="list-style-type: none"> <i>To use a range of technology to sequence sound samples, giving consideration to the</i> 	<ul style="list-style-type: none"> <i>Use a range of devices to create extended pieces of music using a wide range of pre-</i> 	<p>Audio- use web based on-line tools and iPad apps.</p>

<p><i>audience and purpose.</i></p> <ul style="list-style-type: none"> To use technology to electronically compose music or sounds including creating melodies and save these as audio files. To use technology to capture and edit video, applying a range of different effects and incorporating numerous video clips. To use technology to create images including using layers. To understand the difference between a image and a vector drawing. To independently take photographs and record video taking into account the audience and/or purpose for the image/video. 	<p><i>recorded samples.</i></p> <ul style="list-style-type: none"> Use a range of devices to create music samples and sequence these. Create and plan film trailers incorporating a range of different scenes and effects. Use image creation tools to create more complex images, including using layers. Understand the differences between an image and a vector drawing. Continue to choose to independently record video for a range of purposes. Continue to take photographs for a specific reason or project and/or find appropriate images on-line. 	<p>I-motion IPAD</p> <p>Garage band</p> <p>IMOVIE</p> <p>Robert Kett documentary</p>
<p>Using Data</p>		
<ul style="list-style-type: none"> To continue to use, search, enter data into and create their own databases To continue to use technology, including spreadsheets to create graphs and present data in different ways.. 	<ul style="list-style-type: none"> Continue to use the computer and spreadsheets to create and alter graphs and charts. Continue to use, query and create their own databases as appropriate, linking into work across the curriculum. If appropriate and cross curricular links present the opportunity, begin to explore spreadsheets entering basic formulae. 	<p>Graphs using excel</p> <p>Data loggers</p>
<p>Programming and Control</p>		
<ul style="list-style-type: none"> To continue to develop their understanding of how computer and technology works and how computers process instructions and commands, including the use of coding languages. To explore ways in which software can be planned. 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. 	<ul style="list-style-type: none"> Continue to develop an understanding of how technology works, with a focus on developing computational thinking. Understand that software relies on codes to run and that a range of different coding languages exist. Explore different ways in which computer software can be planned. Use a range of assited programing software (e.g Scratch and/or Kodu) to plan, design and create basic software (for example a simple game), which interact with external controllers (e.g. keyboard and/or mouse). Using the software control the movement and responses of different 	 <p>Scratch Tynker</p>

	<p>elements on screen.</p> <ul style="list-style-type: none"> • Use visual programming based software to plan, design and create basic non-game software which use logic, algorithms and calculations. <i>(e.g. use scratch to create an interactive maths quiz for a KS1 child)</i> 	
<p>Modelling and Simulations</p>		
<ul style="list-style-type: none"> • To understand that ICT allows for situations to be modelled, or those which it would be impractical to try out in real life and investigate the effect of changing variables in these simulations. • Know that simulations are often guided by hidden rules • To use software to model 3D objects. 	<ul style="list-style-type: none"> • Use software to create models of 3D objects, landscapes or items. • Explore a range of increasingly complex simulations, exploring the effect of changing variables and recording the results. 	<p>Use Trimble Sketckup for the 3D modelling task.</p>