



# Computing



***Together Promoting Success***

**The Tilery Curriculum**



## **Purpose of study**

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

## **Aims**

The national curriculum for computing aims to ensure that all pupils:

- 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
- are responsible, competent, confident and creative users of information and communication technology.

## KS1 Computing Subject Content

### Key stage 1

Pupils should be taught to:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- 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.

## KS2 Computing Subject Content

### Key stage 2

Pupils should be taught to:

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- 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
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- 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
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

## Stockton Progression Guidance

Progression Theme: Data Handling				
Coverage:				
<ul style="list-style-type: none"> <li>Understanding &amp; Collecting Data</li> <li>Creating &amp; Interpreting Graphs</li> <li>Creating &amp; Interrogating Databases</li> <li>Presenting Data &amp; Search Results</li> </ul>				
Concepts				
	Foundations	Early	Middle	Later
GENERAL	<p>Begin to understand that there are different types of questions that provide different kinds of answers.</p> <p><i>(PSED Making Relationships, C+L Understanding, C+L Speaking, UW The World)</i></p>	<p>Understand that information (data) is communicated all around us using a variety of methods.</p> <p>Understand that there are different types of questions that provide different kinds of answers.</p>	<p>Understand that Information can be collected &amp; stored electronically as combinations of numbers, choices (such as yes/no), text or images.</p> <p>Know that data represented graphically can be easier to understand than textual data.</p>	<p>Know that data capture forms are designed to gather specific information.</p> <p>Understand that databases can be interrogated to prove/disprove a hypothesis.</p> <p>Understand the importance of presenting data appropriately for the purpose &amp; audience.</p>
GRAPHING	<p>Begin to understand that data can be collected &amp; presented graphically as simple pictograms.</p> <p><i>(M Numbers)</i></p>	<p>Understand that data can be collected &amp; presented graphically as simple pictograms, pie charts &amp; bar charts.</p> <p>Know that graphs &amp; charts can provide limited answers depending on the query.</p>	<p>Know that different types of graphs &amp; charts are used for different purposes &amp; their levels of readability.</p>	<p>Understand when to use specific graph/chart types to present data appropriately for a particular purpose &amp; audience.</p>
DATABASES	<p>Begin to understand that electronic databases can be used to answer simple queries.</p> <p><i>(PSED Making Relationships, C+L Understanding, C+L Speaking, UW The World, Technology)</i></p>	<p>Know that electronic databases can be used to sort data quickly &amp; efficiently in order to answer simple queries.</p> <p>Know that information stored in a database is divided into individual records &amp; that each record can contain a number of different fields.</p>	<p>Know that ICT can be used to sort &amp; conduct simple searches of data quickly &amp; efficiently recognising the advantages of doing so.</p> <p>Understand that branching databases are used to organise information/conduct simple enquiries through a series of yes/no questions.</p> <p>Understand everyday uses of databases, why they are used &amp; the advantages of doing so.</p>	<p>Know that ICT can be used to conduct increasingly more complex searches of data quickly &amp; efficiently using multiple criteria along a line of enquiry.</p> <p>Understand the consequences of inaccurate information within a database upon search results.</p>

**Progression Theme: Data Handling**

Techniques				
	Foundations	Early	Middle	Later
GENERAL	<p>Begin to participate in a range of simple questioning games to follow a simple line of enquiry.</p> <p><i>(PSED Making Relationships, C+L Understanding, C+L Speaking, UW The World)</i></p>	<p>Discuss different kinds of information (data) presented at home, in the classroom &amp; outside of school recognising the impact of each presentation method &amp; their advantages.</p> <p>Participate in a range of simple questioning games e.g. 'Guess Who', 20 Questions etc to follow a simple line of enquiry.</p>	<p>Collect data using simple appropriate formats to answer specific questions &amp; draw conclusions.</p> <p>Compare a range of graphs &amp; charts and discuss their clarity, advantages &amp; when they are best used.</p>	<p>Design a data capture form to collect specific information.</p> <p>Interrogate a database to test an identified hypothesis.</p> <p>Present data using a variety of electronic/non-electronic methods appropriate for the needs of the audience recognising the impact of both.</p>
	GRAPHING	<p>Use graphing software as a group to create simple pictograms.</p> <p><i>(PSED Making Relationships, C+L Understanding, C+L Speaking, UW The World, Technology)</i></p>	<p>Use graphing software to create/edit simple pictograms, pie charts &amp; bar graphs based on given &amp; collected data.</p> <p>Use graphs &amp; charts to answer simple enquiries and draw conclusions.</p>	<p>Create a range of simple graphs &amp; charts for particular purposes and their levels of readability in order to answer a variety of questions.</p>
DATABASES	<p>Use sorting tools within a database as a group to answer to simple lines of enquiry.</p> <p><i>(PSED Making Relationships, C+L Understanding, C+L Speaking, UW The World, Technology, M Numbers)</i></p>	<p>Navigate a simple database and discuss the information it contains, saving &amp; retrieving their work.</p> <p>Use a simple database to enter data and save a new record.</p> <p>Use the sorting tools within a database to answer to simple lines of enquiry.</p>	<p>Conduct searches using single criteria to answer simple lines of enquiry.</p> <p>Create a simple database containing a number of records on a given topic.</p> <p>Use an existing branching database to answer simple lines of enquiry.</p> <p>Create a branching database on a given topic.</p>	<p>Conduct more complex searches within a database for a specific purpose using 'AND', 'OR' and the '&lt;' / '&gt;' symbols.</p> <p>Determine database's accuracy by checking data thoroughly correcting where appropriate.</p> <p>Create a more complex database for an identified purpose determining record structure and field type.</p>

## Progression Theme: Digital Media

### Coverage:

- Recording, Composing & Editing Sound
- Creating Animations
- Capturing & Editing Digital Video
- Publishing Video Online & Copyright

Concepts				
	Foundations	Early	Middle	Later
GENERAL	<p>Begin to understand that moving images can be captured and reviewed.</p> <p><i>(C+L Understanding, C+L Speaking, UW The World, Technology)</i></p>	<p>Know that moving images can be captured and imported from a variety of sources &amp; devices e.g. the Internet, digital cameras, smartphones, webcams etc.</p>	<p>Know that digital video can be edited and enhanced for a particular purpose &amp; audience using video editing software.</p>	<p>Know that a large scale project needs to be broken down into small achievable steps and be able to review their progress towards identified goals.</p> <p>Understand their individual role within a collaborative group setting and be able to contribute effectively towards shared targets.</p>
SOUND	<p>Begin to understand that sound devices can be used to play and record sounds.</p> <p><i>(C+L Understanding, C+L Speaking, UW The World, Technology, EAD Exploring and using media and materials)</i></p>	<p>Know that sound devices can be used to record &amp; compose music for specific purposes.</p> <p>Understand that ICT can be used to select, control, sort and reorganise sounds.</p>	<p>Know that sound software applications enable many sounds to be combined using different tracks and that these can be organised &amp; edited to form original compositions.</p>	<p>Understand the role &amp; impact of sound upon an audience and know how &amp; when to apply this appropriately within digital media tasks.</p> <p>Know that electronic sounds are recorded in many file formats &amp; that these can be converted.</p>
ANIMATION	<p>Begin to understand that stop-frame animation software can record a series of still frames.</p> <p><i>(C+L Understanding, C+L Speaking, UW The World, UW Technology)</i></p>	<p>Know that animations are created from a series of related still frames around a given theme.</p> <p>Understand that stop-frame animation software can record a series of frames as a single clip and can be exported &amp; edited within video editing applications.</p>	<p>Know that the smaller the movement of an object between each frame, results in a much smoother final animation.</p> <p>Know that multiple clips can be combined to create more complex animation.</p> <p>Understand that animation software allows the manipulation of frames such as duplication, re-ordering, reversal etc.</p>	<p>Know that animation software enables the limiting factor (number of frames per second displayed) to be set and understand the impact this has on the final product.</p> <p>Know that the 'Chroma key' special effect allows a background graphic to be displayed by making an identified colour transparent e.g. most commonly green or blue.</p>

<p style="text-align: center;"><b>DIGITAL VIDEO</b></p>	<p>Begin to understand the need to keep a digital video camera still when taking video in order to gain the best results.</p> <p><i>(C+L Understanding, PD Moving and Handling, EAD Exploring and using media and materials)</i></p>	<p>Understand the need to keep a digital video camera still when taking video in order to gain the best results.</p>	<p>Understand how the use of camera framing, sound, light &amp; colour combine to communicate a message recognising the impact on the audience.</p> <p>Understand the role &amp; purpose of different camera framing techniques and how/why these are used by film/television/games directors.</p>	<p>Understand the impact on an audience of using visual effects within moving image media and why directors employ such techniques.</p> <p>Know that digital video can be saved in many different file formats &amp; sizes and can be shared to a mass audience very easily using online resources.</p>
<p style="text-align: center;"><b>E-SAFETY &amp; COPYRIGHT</b></p>	<p>Begin to understand who to talk to if children discover inappropriate digital video images when using the Internet either in, or beyond the school.</p> <p><i>(PSED Managing Feelings and Behaviour, C+L Understanding, C+L Speaking, UW Technology)</i></p>	<p>Know who to talk to if children discover inappropriate digital video images when using the Internet either in, or beyond the school.</p>	<p>Understand the school's e-safety expectations for taking &amp; the use of digital video and the reasons why this is the case.</p> <p>Understand what is meant by the term 'copyright' and how this applies to sound &amp; digital video.</p>	<p>Understand copyright principles and consistently apply these to their own work ensuring that recognised terms &amp; conditions are adhered to and sources of sound &amp; digital video are acknowledged appropriately.</p> <p>Understand the impact of 'piracy' on the music/film industry and the implications for licensing &amp; distribution.</p>

Progression Theme: Digital Media				
	Techniques			
	Foundations	Early	Middle	Later
SOUND	<p>Play sounds from a software library of sample sounds.</p> <p>Record different kinds of sounds e.g. voices, environmental etc.</p> <p><i>(C+L Listening + Attention, UW The World, Technology, EAD Exploring and using media and materials)</i></p>	<p>Select &amp; play sounds from a software library of sample sounds/loops.</p> <p>Record sounds of different kinds e.g. voices, musical instruments, ambient sounds etc using a variety of devices.</p> <p>Compose, import &amp; edit musical phrases/pieces using pre-recorded samples &amp; their own recorded sounds for an identified purpose &amp; audience.</p> <p>Export their music compositions to use within other multimedia presentations.</p> <p>Publish their music compositions to a wider audience using safe online resources.</p>	<p>Identify appropriate online sources of sound files &amp; independently import them into multimedia applications.</p> <p>Create simple music compositions involving the layering of 'tracks' considering the impact &amp; relationship of combining sound files together.</p> <p>Create &amp; record their own software instrument tracks within music authoring software using input devices such as on-screen &amp; external USB music keyboards and in-built software sounds.</p> <p>Use music authoring software to record voices adding vocal effects e.g. reverberation, pitch shifting as appropriate considering the overall impact on the final composition.</p> <p>Create simple enhanced podcasts on a given theme &amp; publish them safely for a wider audience.</p>	<p>Compose more complex music scores for an identified purpose with a clear emphasis on the arrangements &amp; relationships of tracks within the overall piece.</p> <p>Demonstrate good microphone control/technique when recording spoken &amp; vocal arrangements e.g. maintaining the same distance from the microphone when speaking and ensuring an appropriate sound level as to avoid a distorted recording.</p> <p>Edit existing &amp; create their own music loops for a particular purpose adding them to the sample loop library for future use.</p> <p>Plan &amp; create increasingly complex enhanced podcasts containing visual, spoken, web links, musical elements &amp; publish to a wider audience.</p>
ANIMATION	<p>Use animation software to capture a series of images to create a simple stop frame animation.</p>	<p>Produce a simple visual storyboard on a given theme in preparation for creating an animation.</p> <p>Use appropriate features of animation software to capture &amp; sequence a series of images to create a simple stop frame animation.</p> <p>Add simple audio &amp; titles to their animation using video editing software.</p> <p>Export their animation in preparation for distribution to a known audience.</p>	<p>Create a more detailed annotated storyboard outlining progression around an identified narrative theme.</p> <p>As a group member, set up animation equipment connecting devices correctly using appropriate leads &amp; connections.</p> <p>Produce a more complex stop-frame animation around a given theme involving multiple clips &amp; frames demonstrating frame manipulation &amp; organisation e.g. duplication &amp; reversal.</p>	<p>Produce a detailed storyboard in preparation for their animation demonstrating a thorough awareness of scenes, visual &amp; sound effects and the combined impact these have in communicating the visual narrative.</p> <p>Set the limiting factor within animation software in order to achieve a desired outcome e.g. capturing more frames per second in order to produce a smoother final animation.</p> <p>Enable &amp; edit Chroma-key settings/levels within animation</p>

			Add audio & title effects to their animation using video editing software for an identified purpose and recognise the impact on the viewer.	software to achieve a desired outcome.
<b>DIGITAL VIDEO</b>	<p>Capture digital video and be able to playback knowing the functions of record, play, stop &amp; pause.</p>	<p>Produce a simple visual storyboard on a given theme in preparation for creating a digital video.</p> <p>Capture digital video from a range of devices &amp; import into video editing software.</p> <p>Use video editing tools to select, crop &amp; re-order their scenes on a timeline.</p> <p>Add simple audio, titles &amp; pre-set themes to their imported content using video editing software.</p> <p>Export their digital video in preparation for distribution to a known audience.</p>	<p>Create a more detailed annotated storyboard outlining progression around an identified narrative theme.</p> <p>Use a camera tri-pod effectively to enable stable capturing of digital video contents depending on required outcome.</p> <p>Use digital video camera/device features to frame &amp; capture simple scenes for a particular purpose &amp; identified impact on the viewer e.g. establishing shot, mid-shot, close-up, dutch-tilt etc.</p> <p>Import, arrange and edit digital video contents with increasing accuracy &amp; control, adding more complex titles, credits &amp; transitions for desired effect.</p>	<p>Produce a detailed annotated storyboard in preparation for their digital video demonstrating a thorough awareness of scenes, visual &amp; sound effects and the combined impact these have in communicating the visual narrative.</p> <p>Apply a range of visual effects to video content to achieve a desired outcome and impact on the viewer e.g. slow motion, black &amp; white filter etc.</p> <p>Use multiple camera sourced content to form &amp; edit their digital video project making use of video editing features such as cut-away &amp; picture-in-picture effects for a desired outcome.</p> <p>Export their final digital video project to a variety of file types depending on the requirements of publishing to other device operating systems &amp; online video sharing resources.</p>

Progression Theme: Digital Research				
Coverage:				
<ul style="list-style-type: none"> <li>Understanding Different Forms of Information</li> <li>Locating &amp; Publishing Information</li> <li>Evaluating Information for Accuracy &amp; Reliability</li> <li>Understanding Plagiarism &amp; Copyright</li> </ul>				
Concepts				
	Foundations	Early	Middle	Later
<b>GENERAL</b>	<p>Begin to understand that the Internet enables the sharing of information easily.</p> <p><i>(C+L Understanding, C+L Speaking, UW The World, Technology)</i></p>	<p>Know that information exists in many different forms i.e. sound, text, still &amp; moving images and can be gathered from numerous sources for particular purposes/outcomes.</p> <p>Know that the Internet enables the sharing of information easily across the global community.</p> <p>Know that website addresses are unique and need to be entered accurately into a web browser.</p> <p>Understand that related Information can be linked using hyperlinks to aid navigation.</p>	<p>Know when the Internet is the most suitable method for locating information for a particular purpose and intended outcome.</p> <p>Understand the different elements of a website address recognising the function that each section fulfils e.g. the domain name &amp; domain extension such as 'co.uk' etc.</p> <p>Know that it is important to be selective when accessing or sharing information using the internet.</p> <p>Understand the nature &amp; purpose of Internet filtering and how this provision may differ beyond the school.</p>	<p>Understand that information is increasingly shared via social networking sites and this can influence other users' choices/actions online e.g. user product reviews/feedback scores influencing purchasing decisions etc.</p> <p>Know that online information can be aggregated around a particular chosen theme &amp; if desired saved for reading offline.</p>

<b>SEARCHING</b>	<p>Begin to understand that a search engine is used to locate information on the Internet.</p> <p><i>(C+L Understanding, C+L Speaking, UW The World, Technology, Literacy – reading and writing)</i></p>	<p>Know that ICT enables access to a wealth of stored information and allows searches to be made quickly &amp; with increasing efficiency using keywords &amp; phrases to answer queries.</p> <p>Know that there are a variety of Internet search engines available and some are more child friendly than others i.e. layout &amp; filtered search results.</p>	<p>Understand that search engines will offer intelligent search results i.e. ‘did you mean’ results when mistyping a word.</p> <p>Understand how search engines can offer the user choice in how they view search results e.g. everything, images only, videos, shopping etc.</p> <p>Know that search results can vary in their relevance to the intended query/topic.</p> <p>Know that websites accessed can be bookmarked &amp; saved to their favourites toolbar/folder for future use.</p> <p>Know that Internet browsers record the ‘history’ of websites viewed over a given time period.</p>	<p>Understand how an Internet search engine locates &amp; displays website information and increasingly how search results are tailored to your individual user profile e.g. location aware &amp; use of tracking cookies.</p>
<b>ACCURACY &amp; COPYRIGHT</b>	<p>Begin to understand that not everything on the Internet is factual.</p> <p><i>(C+L Understanding, C+L Speaking, UW The World, Technology)</i></p>	<p>Know that not everything on the Internet is factual and have an increasing knowledge/awareness that websites may contain personal opinion and/or inaccurate information.</p>	<p>Know that effective online research incorporates evaluating sources of information for accuracy/relevance prior to including it within their own documents/presentations &amp; recognise the dangers of not doing so.</p> <p>Understand what is meant by the terms ‘copyright’ &amp; ‘plagiarism’ and how these apply to using Internet content within their own work.</p>	<p>Understand copyright principles and consistently apply these to their own work ensuring that recognised terms &amp; conditions are adhered to and sources of online information are acknowledged appropriately.</p>
<b>E-SECURITY</b>	<p>Begin to understand that advertisements on websites may not always be truthful.</p> <p><i>(C+L Understanding, C+L Speaking, UW The World, Technology)</i></p>	<p>Understand that advertisements on websites/pop-ups may not always be truthful and that they should avoid clicking on them where possible.</p>	<p>Understand that Internet browsers can be configured to block unwanted ‘pop-ups’ and if clicked some of these pop-ups may download a virus to your device.</p> <p>Understand what a computer virus is, their impact, how they are spread &amp; how they can protect their device against infection.</p>	<p>Understand the nature of ‘in-app purchasing’ and the role of ‘free/lite versions’ of apps in enticing users to make further purchases, sometimes unwittingly.</p>

Progression Theme: Digital Research				
	Techniques			
	Foundations	Early	Middle	Later
SEARCHING	<p>Conduct simple searches on the Internet as a group.</p> <p><i>(PSED Making Relationships, C+L Understanding, C+L Speaking, UW The World, Technology)</i></p>	<p>Describe both ICT and non-ICT strategies they use as an individual to locate information, evaluating the effectiveness of each.</p> <p>Conduct simple searches &amp; use appropriate navigation tools e.g. keyword searches, menus, indexes, hyperlinks, to locate information for a particular purpose and intended outcome.</p> <p>Access identified websites using provided bookmarks within a favourites toolbar/menu/home screen.</p> <p>Enter simple website addresses accurately into Internet browsers to access identified websites e.g. the school Learning Platform.</p>	<p>Configure &amp; use Internet browser settings e.g. toolbars, tabbed browsing, blocking pop-ups etc to increase user speed, efficiency &amp; safety.</p> <p>Use search techniques/page links/results to follow an increasingly more complex/refined line of enquiry for an intended outcome e.g. using quotation marks to search for particular phrase etc.</p> <p>Use a range of search engine options to locate specific information/resource types e.g. images of specific sizes, videos etc.</p> <p>Add websites to their 'favourites' using bookmark menus/toolbars.</p> <p>Using Internet browser functions &amp; keyboard short cuts to import online information/resources into other applications for a particular purpose &amp; outcome.</p>	<p>Use &amp; configure different Internet browsers to access online resources &amp; evaluate the effectiveness of layout/tools contained within each one offering personal preference.</p> <p>Add, organise &amp; manage their own Internet favourites efficiently around identified themes using bookmark menus/toolbars, folders, adding links to a device home screen or using online resources e.g. school Learning Platform.</p> <p>Subscribe to a range of 'RSS' feeds for identified themes/topics and view using an appropriate reader e.g. within the school Learning Platform.</p> <p>Access a webpage offline either by saving the page to an appropriate location or using an offline reader application.</p>
ACCURACY & COPYRIGHT	<p>Follow the school's expected e-safety procedures when encountering inappropriate content and/or comments and report the incident to a trusted adult immediately.</p> <p><i>(C+L Understanding, C+L Speaking, UW Technology)</i></p>	<p>Follow the school's expected e-safety procedures when encountering inappropriate content and/or comments e.g. minimising the screen, switching the device to standby etc and reporting the incident to a trusted adult immediately.</p>	<p>Navigate to the 'about' &amp; 'terms &amp; conditions' sections of identified websites in order to assist in determining the validity &amp; sharing permissions of the site content.</p>	<p>Extend their strategies for checking the validity of site content e.g. domain name structure &amp; cross-referencing with other online/offline sources etc and apply accordingly.</p>

Progression Theme: E-Communication				
<b>Coverage:</b> <ul style="list-style-type: none"> <li>• Composing &amp; Sending Messages</li> <li>• Creating &amp; Publishing Blog Entries</li> <li>• Video Conferencing</li> <li>• Contributing to Online Forums &amp; Collaborative Documents</li> </ul>				
<b>Concepts</b>				
	Foundations	Early	Middle	Later
<b>GENERAL</b>	Begin to understand that messages can be communicated electronically.  <i>(C+L Understanding, UW Technology, Literacy)</i>	Know that messages can be combinations of text, sounds & graphics.  Understand that ICT allows people to connect easily with one another both locally & globally.  Know that messages can be communicated electronically quickly & in a variety of ways e.g. email, SMS, video conferencing, social networking sites etc.	Recognise the advantages of using different electronic communication methods in relation to their immediacy e.g. SMS, email, websites, social networking, video conferencing & related push notifications.  Know when it is appropriate to use formal/informal language within electronic communications tools.  Know that a school's Learning Platform contains a variety of tools that facilitate online communication, collaboration & reflection e.g. messaging, discussion forums, surveys, blogs etc.	Know which electronic communication tools are appropriate for an intended purpose/outcome & evaluate their effectiveness.

<b>EMAIL</b>	<p>Begin to understand that email addresses are unique.</p> <p><i>(C+L Understanding, UW Technology Literacy)</i></p>	<p>Know that email addresses are unique, include the '@' symbol and need to be typed accurately when sending.</p> <p>Know that email &amp; SMS messaging can be sent using a range of devices.</p>	<p>Know that messages e.g. emails, SMS, can be read/organised using different views &amp; folders and evaluate the impact in terms of readability &amp; organisation.</p> <p>Know that emails can be sent to more than one recipient at a time and that a distribution list enables a mass email audience understanding why these lists are used.</p> <p>Know that emails can be used to send attachments of different file types and that sometimes these attachments can present a risk to their device by containing a virus.</p> <p>Understand what is meant by &amp; the implications of 'spam' email and why email providers include filtering for this.</p> <p>Understand the need for ensuring their device security settings/software is kept up-to-date to ensure maximum protection.</p>	<p>Know that that email clients can automate functions such as adding signatures to messages, 'out of office' notifications, messages sorting 'rules/filters' and understand the advantages of these functions.</p> <p>Understand that email can be accessed both online &amp; through the use of 'mail clients' on different devices e.g. Apple Mail, Microsoft Outlook etc.</p> <p>Understand that mail can be 'pushed' to other devices for access using 'POP/iMAP' settings and why this is used.</p> <p>Know that organisations offer optional email subscriptions in order to be keep people up to date with services/products and how they can manage/opt out of their subscriptions as an individual.</p>
<b>COLLABORATION</b>	<p>Begin to understand that people can communicate online via the Internet.</p> <p><i>(C+L Understanding, UW Technology Literacy)</i></p>	<p>Know that they should demonstrate respect for other people's opinions when contributing to online collaborative tools.</p>	<p>Know that contributions to collaborative tools e.g. chatrooms, forums, surveys etc can be identified on an individual basis and tracked.</p>	<p>Know that both off &amp; online collaboration is an essential life skill and be able to contribute effectively to achieve a shared intended outcome.</p>

<b>E-SAFETY</b>	<p>Begin to understand that they should not communicate with strangers online.</p> <p><i>(PSED Managing Feelings and Behaviour, C+L Understanding, C+L Speaking, UW Technology Literacy)</i></p>	<p>Know that if they see/hear anything online that makes them unhappy or scared, then they should tell a trusted adult straight away.</p> <p>Know that they should not share personal information online e.g. full name, address, date of birth, telephone number etc without the knowledge &amp; consent of a trusted adult.</p> <p>Know that not everyone online is truthful and that they should not agree to meet an 'online friend' without the knowledge, consent &amp; presence of a trusted adult.</p>	<p>Understand that some emails can contain inappropriate/malicious content and know who to contact if they receive an email of this nature.</p> <p>Understand the need to keep individual passwords secure in order to protect their online safety &amp; identity.</p> <p>Know that cyber-bullying is not acceptable in any form and understand the impact of their actions online.</p> <p>Know the advantages of creating 'nick names' &amp; avatars on social networking sites in order to manage the safety of their online identity.</p>	<p>Know that content posted online can be copied/downloaded/distributed and that they should 'Think Before They Post.'</p> <p>Know that a 'strong' password is formed from a combination of upper/lower case letters, symbols, digits and an increasing number of characters relating to password length.</p> <p>Understand what constitutes a suitable image to be used in online profiles e.g. personal details not easily identifiable such as school name etc.</p> <p>Know that sites that enable online profiles to be created also offer privacy/sharing settings in order to protect a user.</p> <p>Understand the need to respect other people's privacy online through gaining permission before posting details/comments/pictures about others.</p> <p>Understand that 'app' terms &amp; conditions can often include granting access to their own &amp; others personal data and understand the implications of this.</p>
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Progression Theme: E-Communication				
	Techniques			
	Foundations	Early	Middle	Later
EMAIL	<p>Contribute to group emails to identified recipients.</p> <p><i>(C+L Understanding, C+L Speaking, UW Technology Literacy)</i></p>	<p>Contribute to class/group emails to identified recipients entering the address accurately &amp; adding an appropriate subject header/message/attachment.</p> <p>Open, read and reply to class/groups emails.</p> <p>Send class/group SMS (text) messages to identified recipients for a particular purpose.</p>	<p>Compose, reply, reply to all &amp; forward individual emails to identified recipients.</p> <p>Independently add &amp; open email attachments saving files to an appropriate location.</p> <p>Add new contacts and use existing details to send individual &amp; group emails.</p> <p>Select an appropriate message view to improve readability e.g. conversation view and manually move/save messages to new/existing folders to ensure effective inbox organisation.</p> <p>Use an instant messaging service with identified recipients for a particular purpose &amp; discuss comparison with email e.g. immediacy.</p>	<p>Use the CC &amp; BCC functions as appropriate when sending a group email in order to respect other people's privacy.</p> <p>Create &amp; apply signatures, automated 'out of office' responses &amp; filters to their emails/inbox.</p> <p>Extend the use of instant messaging within a collaborative group setting to gather multiple contributions towards a shared goal i.e. use of 'conference' tool within the school Learning Platform.</p>
COLLABORATION	<p>Contribute to group/school online forums, surveys &amp; blogs.</p> <p><i>(PSED Self Confidence and Self awareness, C+L Understanding, C+L Speaking, UW Technology, Literacy)</i></p>	<p>Contribute appropriately to class/group/school online forums, surveys, blogs, websites &amp; social networking pages for a particular purpose &amp; audience.</p>	<p>Use a range of online collaboration tools independently e.g. within the school's Learning Platform, to contribute effectively towards an identified shared outcome.</p> <p>Develop a simple individual online e-portfolio/blogging area e.g. within the school Learning Platform, to include regular personal reflections inviting others to view &amp; comment as appropriate.</p>	<p>Extend the use of individual online e-portfolio areas to include regular updated multimedia personal blog entries, the development of subject/topic specific working e-portfolios and the sharing of content for an intended audience inviting others to view &amp; comment.</p>

<b>VIDEO CONFERENCING</b>	<p>Engage in &amp; contribute to group video conferences.</p> <p><i>(PSED Self confidence and self awareness, C+L Understanding, C+L Speaking, UW Technology Literacy)</i></p>	<p>Engage in &amp; contribute effectively to class/group video conferences with appropriate individuals/groups/organisations in the local area &amp; global community.</p>	<p>Use appropriate video conferencing applications to make group video calls to multiple identified participants for a particular purpose and intended outcome.</p>	<p>Use 'screen sharing' facilities within video conferencing applications to share content as appropriate with an intended audience.</p>
<b>E-SAFETY &amp; E-SECURITY</b>	<p>Follow the school's expected e-safety procedures when encountering inappropriate content and/or comments and report the incident to a trusted adult immediately.</p> <p><i>(C+L Understanding, C+L Speaking, UW Technology)</i></p>	<p>Follow the school's expected e-safety procedures when encountering inappropriate content and/or comments e.g. minimising the screen, switching the device to standby etc and reporting the incident to a trusted adult immediately.</p>	<p>Review their email 'spam' folder deleting unwanted messages and restoring mistakenly labelled non-spam messages to the inbox.</p> <p>Use simple individual passwords ensuring that these are kept private to protect their online safety &amp; identity.</p> <p>Using available resources e.g. clip art, online sources, to create an avatar for use with online profiles.</p>	<p>Create and save 'strong' individual passwords ensuring regular updating e.g. on a monthly basis where appropriate.</p> <p>Select &amp; upload an appropriate image e.g. to the school Learning Platform, to use as a profile picture within an online profile.</p> <p>Edit &amp; update online privacy/sharing settings in order to ensure the safety/security of their online profile.</p>

Progression Theme: Models & Simulations				
Coverage:				
<ul style="list-style-type: none"> <li>• Computer models</li> <li>• Simulations</li> </ul>				
	Concepts			
	Foundations	Early	Middle	Later
MODELS	<p>Begin to know that computer models can represent real or imaginary situations.</p> <p><i>(C+L Understanding, C+L Speaking, UW Technology, EAD Being imaginative)</i></p>	<p>Know that computer models can represent real or imaginary situations.</p> <p>Know that computers can be used to model a wide range of scenarios or environments and some are more elaborate than others.</p> <p>Understand that a computer model may not be an exact replica of the original.</p> <p>Understand that many computer games are models.</p>	<p>Understand that models may be represented in different ways, in particular graphic / visual models and spreadsheets.</p> <p>Understand the limitations of using a computer model rather than the original.</p> <p>Understand that computer models, including computer games, may be governed by a set of rules or behaviours.</p> <p>Know that a spreadsheet can be used to model mathematical or financial situations.</p>	<p>Understand the need for accurate entry of data and formulae / functions when creating a spreadsheet model.</p> <p>Understand the concept of efficiency when developing a spreadsheet model.</p> <p>Know that outcomes in a computer game are a result of actions and/or decisions taken.</p>
SIMULATIONS	<p>Begin to understand that computer simulation allows the user to make choices.</p> <p><i>(C+L Understanding, C+L Speaking, UW Technology, EAD Being imaginative)</i></p>	<p>Know that a simulation is the process of using a model for a purpose.</p> <p>Know why simulations are used.</p> <p>Understand that computer simulation allows the user to make choices and that different decisions produce different outcomes.</p>	<p>Understand that computer simulations can be used to find things out and solve problems.</p> <p>Understand that computer simulations, including those which use spreadsheet models, allow changes to be made quickly and easily in comparison with real life situations.</p>	<p>Understand that computer simulations can be used to answer 'What If...?' questions and investigate patterns and relationships.</p> <p>Know that mathematical models can be explored for given purposes using a spreadsheet e.g. determining profit / loss.</p> <p>Know that a complex simulation is dependent upon the interplay between the many variables</p>

## Progression Theme: Models & Simulations

Progression Theme: Models & Simulations				
	Techniques			
	Foundations	Early	Middle	Later
MODELS	<p>Explore computer based games which model a real life or imaginary situation or object.</p> <p><i>(C+L Understanding, C+L Speaking, UW Technology, EAD Being imaginative)</i></p>	<p>Explore a range of computer models of situations or objects which are familiar and which vary in complexity.</p>	<p>Interact with a range of computer models including graphic / visual and spreadsheets</p> <p>Create a simple model using a spreadsheet for a particular purpose.</p> <p>Investigate the rules behind a simple computer game which models a real life or imaginary situation or object.</p>	<p>Create spreadsheet models for a range of purposes, ensuring accuracy of entry of data and formulae / functions as well as demonstrating efficiency.</p> <p>Create a simple computer game which makes use of rules to affect outcomes.</p>
SIMULATIONS	<p>Use tools within a computer simulation to achieve an outcome.</p> <p><i>(C+L Understanding, C+L Speaking, UW Technology, EAD Being imaginative)</i></p>	<p>Use appropriate tools within a computer simulation to achieve a specific outcome.</p> <p>Use appropriate tools to explore the effect of making choices in a computer simulation.</p>	<p>Explore the effect of changing the variables in computer simulations, including graphic / visual and spreadsheets and use them to make and test predictions.</p> <p>Make appropriate choices when using computer simulations to help find things out and solve problems</p>	<p>Explore graphic / visual and spreadsheet simulations in order to answer 'What if ... ?' questions, to investigate and evaluate the effect of changing values and to identify patterns and relationships</p> <p>Explore the effect of changing the variables in complex simulations.</p>

## Progression Theme: Programming & Control

**Coverage:**

- Algorithms
- Programs
- Control & Data Logging

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Concepts				
	Foundations	Early	Middle	Later
<b>ALGORITHMS</b>	<p>Begin to understand that algorithms are sets of instructions for achieving goals.</p> <p><i>(C+L Understanding, C+L Listening and Attention)</i></p>	<p>Know that algorithms are sets of instructions for achieving goals, made up of pre-defined steps (e.g. the 'how to' part of a recipe for a cake).</p> <p>Know that algorithms can be represented in simple formats (storyboards and narrative text).</p> <p>Understand that algorithms can describe everyday activities and can be followed by humans and by computers.</p> <p>Understand that computers need more precise instructions than humans do.</p> <p>Know that steps can be repeated and some steps can be made up of smaller steps.</p>	<p>Know that algorithms can be represented symbolically [flowcharts] or using instructions in a clearly defined language [turtle graphics / logo].</p> <p>Know that algorithms can include selection (if) and repetition (loops).</p> <p>Understand that algorithms should be stated without ambiguity and care and precision are necessary to avoid errors.</p>	<p>Understand that algorithms may be decomposed into component parts (procedures), each of which itself contains an algorithm.</p> <p>Know that algorithms are developed according to a plan and then tested. Algorithms are corrected if they fail these tests.</p> <p>Understand that it can be easier to plan, test and correct parts of an algorithm separately.</p>
<b>PROGRAMS</b>	<p>Begin to understand that computers follow a stored sequence of instructions.</p> <p><i>(C+L Understanding, C+L Listening and Attention Understanding the world – Technology)</i></p>	<p>Understand that a computer program is like the narrative part of a story, and the computer's job is to do what the narrator says. Computers have no intelligence, and so follow the narrator's instructions blindly.</p> <p>Know that particular tasks can be accomplished by creating a program for a computer. Some computers allow their users to create their own programs.</p> <p>Know that computers typically accept inputs, follow a stored sequence of instructions and produce outputs.</p> <p>Understand that programs can include repeated instructions.</p>	<p>Know that a computer program is a sequence of instructions written to perform a specified task with a computer.</p> <p>Understand that programs are unambiguous and that care and precision is necessary to avoid errors.</p> <p>Know that computers can be programmed so they appear to respond 'intelligently' to certain inputs.</p>	<p>Understand the idea of a program as a sequence of statements written in a programming language [Scratch]</p> <p>Know that programs can model and simulate environments to answer "What if" questions.</p> <p>Understand that programs are developed according to a plan and then tested. Programs are corrected if they fail these tests.</p> <p>Understand that the behaviour of a program should be planned.</p>

<b>CONTROL</b>	<p>Begin to understand that some machines and devices are controlled by sequences of instructions.</p> <p><i>(C+L Understanding, C+L Listening and Attention, Understanding the world-Technology)</i></p>	<p>Know that some machines and devices (including programmable toys, phones, game consoles and PCs) are controlled by sequences of instructions.</p>	<p>Understand that control software can be used to control an output device.</p> <p>Understand that ICT sensing devices can be used to monitor changes in environmental conditions.</p>	<p>Know that rotation, touch, light, sound, ultrasound sensors can be used to trigger an event</p> <p>Know that control software can be used with one or more output devices at the same time</p> <p>Know that a device attached to a computer can take readings of conditions such as light intensity, temperature and sound levels</p> <p>Know that computers can take sample data for a set period of time and that change over time can be recorded electronically for later evaluation and analysis.</p>
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Progression Theme: Programming & Control				
	Techniques			
	Foundations	Early	Middle	Later
ALGORITHMS	<p>Order a collection of pictures into the correct sequence.</p> <p><i>(C+L Understanding, C+L Listening and Attention, L Reading, M Shape, Space and Measures)</i></p>	<p>Talk about existing storyboards of everyday activities.</p> <p>Draw storyboards of everyday activities.</p>	<p>Recognise similarities between storyboards of everyday activities.</p> <p>Analyse and represent symbolically [Flowcharts] a sequence of events.</p> <p>'Think through' an algorithm and predict an output.</p>	<p>Analyse and present an algorithm for a given task.</p> <p>Recognise similarities between simple problems and the commonality in the algorithms used to solve them.</p> <p>Partially decompose a problem into its sub-problems and make use of a notation to represent it.</p>
PROGRAMS	<p>Give direct commands to make things happen such as playing robots.</p> <p><i>(C+L Understanding, C+L Listening and Attention, C+L Speaking, EAD Being Imaginative)</i></p>	<p>Plan and give direct commands to make things happen such as playing robots.</p>	<p>Plan a linear (non-branching) sequence of instructions.</p> <p>Give a linear sequence of instructions to make things happen.</p> <p>Develop and improve a sequence of instructions.</p> <p>Give instructions involving selection and repetition.</p>	<p>Develop, try out and refine sequences of instructions, and show efficiency in framing these instructions.</p> <p>Explore the effects of changing the variables in a program.</p> <p>Reflect critically on programs they have written in order to make improvements in subsequent programming exercises.</p> <p>Make use of procedures without parameters in their programs</p>
CONTROL	<p>Make programmable toys carry out instructions.</p> <p><i>(C+L Understanding, C+L Listening and Attention, KW Technology, EAD Being Imaginative)</i></p>	<p>Make programmable toys carry out instructions for a specific purpose.</p> <p>Solve simple problems using programmable toys.</p>	<p>Control output devices, by building a sequence of events, to solve a problem.</p> <p>Control simple devices, such as small motors, light bulbs, buzzers, by giving direct instructions.</p>	<p>Use simple control language to control multiple output devices concurrently.</p> <p>Use input devices (Rotation, touch, light, sound, ultrasound sensors) to sense changes and trigger appropriate events.</p> <p>Attach a sensor to a device connected to a computer and take readings.</p> <p>Use the program setup features to set variables such as selected sensor and time span of recording.</p>

## Progression Theme: Text & Graphics

### Coverage:

- Keyboard & Typing Skills
- Composing, Editing & Formatting Text
- Importing & Editing Graphics
- Publishing & Presenting Text/Graphics

Concepts				
	Foundations	Early	Middle	Later
GENERAL	<p>Begin to understand that a message can be communicated in a variety of ways including digitally.</p> <p><i>(C+L Understanding, UW Technology, Literacy)</i></p>	<p>Understand that a message can be communicated more effectively using text &amp; graphics.</p> <p>Understand that ICT makes it easy to make changes, correct mistakes and save progress for a later date.</p>	<p>Understand that content &amp; design elements of a simple presentation should be carefully chosen for the intended purpose and audience.</p> <p>Know that evaluating progress and making necessary changes are all part of the design process and that ICT enables these changes to be made easily.</p>	<p>Evaluate the impact of a presentation for a particular purpose &amp; audience, identifying effective design criteria and being able to apply these to their own and others on-going work.</p> <p>Know that images &amp; documents can be stored 'in the cloud' using online storage facilities and recognise the advantages that this offers in terms of access and sharing.</p>
TEXT	<p>Begin to understand the importance of being able to navigate a keyboard confidently.</p> <p>Begin to understand that text can be formatted in different ways e.g. colour &amp; size.</p> <p><i>(C+L Understanding, UW Technology, PD Moving and Handling, Literacy)</i></p>	<p>Understand the importance of being able to navigate a keyboard confidently &amp; enter text with increasing speed &amp; accuracy.</p> <p>Understand that text can be formatted in different ways to explore alternatives e.g. font style, colour &amp; size.</p>	<p>Know that ICT can make editing &amp; formatting text more efficient through using tools such as spell check, search &amp; replace.</p>	<p>Know that the overall presentation &amp; impact of a document can be improved by ensuring consistency of text formatting e.g. style &amp; size.</p>

<b>GRAPHICS</b>	<p>Begin to understand that still images can be captured digitally and reviewed.</p> <p>Begin to understand the need to keep a camera still when taking photographs in order to gain the best results.</p> <p>Begin to understand that a graphics package contains a number of simple tools to create images e.g. brushes, stamps etc.</p> <p><i>(C+L Understanding, UW Technology, PD Moving and Handling)</i></p>	<p>Know that the term 'graphics' can be used to include user generated 'painted' type images, clipart &amp; photographs.</p> <p>Know that still images can be captured and imported from a variety of sources &amp; devices e.g. the Internet, digital cameras, smartphones etc.</p> <p>Understand the need to keep a camera still when taking photographs in order to gain the best results.</p> <p>Understand that a graphics package contains a number of simple tools to edit images e.g. cropping.</p>	<p>Know that digital images can be edited and enhanced for a particular purpose using a graphics package.</p> <p>Know that a graphics package contains a wide range of tools &amp; effects and begin to broaden their understanding of their application recognising the overall impact on the image e.g. re-sizing, pre-set visual effects etc.</p>	<p>Understand the concept of the 'rule of thirds' when composing, capturing &amp; editing graphics and know that images can be tagged according to their location when taken.</p> <p>Know that graphics can be created/edited by combining &amp; manipulating objects on different layers.</p> <p>Understand the difference between a 'bit-map' and 'vector' based graphic.</p> <p>Know when to use either a bit-map or vector based graphics application depending on the purpose and intended outcome.</p> <p>Understand that devices can save graphics in different file formats and that these can be converted knowing why this is sometimes required e.g. using another computer operating system.</p>
<b>E-SAFETY &amp; COPYRIGHT</b>	<p>Begin to understand who to talk to if children discover inappropriate digital still images when using the Internet either in, or beyond the school.</p> <p><i>(PSED Managing Feelings and Behaviour, C+L Understanding, C+L Speaking, UW Technology)</i></p>	<p>Know who to talk to if children discover inappropriate digital still images when using the Internet either in, or beyond the school.</p>	<p>Understand the school's e-safety expectations for taking &amp; the use of photographs and the reasons why this is the case.</p> <p>Understand what is meant by the term 'copyright' and how this applies to text &amp; graphics etc.</p>	<p>Understand copyright principles and consistently apply these to their own work ensuring that recognised terms &amp; conditions are adhered to and sources of text &amp; graphics are acknowledged appropriately.</p>

Progression Theme: Text & Graphics				
	Techniques			
	Foundations	Early	Middle	Later
GENERAL	<p>Enter text on a device keyboard with increasing speed &amp; accuracy.</p> <p>Navigate a device screen using a variety of methods e.g. a mouse, interactive whiteboard pen or using a touch screen.</p> <p>(Literacy, Physical Development, <i>UW Technology</i>)</p>	<p>Use both hands when entering text on a device keyboard with increasing speed &amp; accuracy.</p> <p>Enter &amp; edit text accurately using tools such as space bar, backspace, shift to create capital letters/other characters, enter to start a new paragraph, delete &amp; caps lock.</p> <p>Navigate text using a variety of methods e.g. a mouse, arrow keys, interactive whiteboard pen or using a touch screen.</p>		
TEXT	<p>Format simple text captions e.g. font style, size and colour.</p> <p>Save entered &amp; amended text.</p> <p>(Literacy, Physical Development, <i>UW Technology</i>)</p>	<p>Highlight text in order to format font style e.g. type, bold, italics, size, justification and colour.</p> <p>Save entered &amp; amended text to an appropriate location using a suitable file name.</p>	<p>Edit, add &amp; remove toolbars within a word processing application to increase user speed &amp; efficiency.</p> <p>Select page orientation e.g. portrait or landscape depending upon the purpose of the document.</p> <p>Highlight text using an increasing range of efficient methods e.g. double clicking on a word, clicking in the document margin, using 'select all' either from the edit menu or keyboard shortcuts, shift &amp; click.</p> <p>Refine &amp; edit text organisation/layout using cut, copy &amp; paste functions.</p> <p>Use language tools to ensure accuracy &amp; enhance text content e.g. spell check, find &amp; replace, thesaurus and associated settings.</p> <p>Insert &amp; format text boxes, text/page borders &amp; simple tables to organise &amp; enhance document presentation.</p>	<p>Use page layout options to select &amp; edit page sizes, columns, margins, indents, line spacing &amp; watermarks to enhance document organisation.</p> <p>Use the format painter function to ensure consistent presentation across a document.</p> <p>Insert and format more complex tables for an identified purpose e.g. adding/removing rows/columns, merging cells, distributing rows/columns, aligning text.</p> <p>Use different views when previewing a document recognising the reasons for &amp; the advantages of each.</p> <p>Use reviewing tools to make comments/suggest changes to evaluate the overall impact when creating &amp; developing a collaborative document.</p> <p>Use version control tools to track the development of a collaborative document.</p>

<b>GRAPHICS</b>	<p>Use simple tools within a graphics package to generate images e.g. pens, brushes, flood fill &amp; stamps.</p> <p>Capture still images using a digital camera and review pictures taken.</p> <p>(Physical Development, <i>UW Technology</i>)</p>	<p>Use simple tools within graphics packages to generate images for a particular purpose e.g. pens, brushes, spray, flood fill, lines, shapes &amp; stamps.</p> <p>Capture quality digital still images using a range of devices e.g. digital camera, smartphone, visualiser, webcam.</p> <p>Locate, select &amp; save appropriate graphics from safe online sources and import them into a document/graphic package.</p> <p>Use simple tools within graphics packages to edit captured/imported images for a particular purpose e.g. cropping &amp; re-sizing.</p>	<p>Use screen capture tools &amp; applications to import graphics into a document/graphics package.</p> <p>Use a graphics package to select elements/sections of an image for re-sizing &amp; duplication e.g. to form repeating patterns.</p> <p>Apply visual effect pre-sets within a graphic package for a particular purpose &amp; recognise the impact this has on the image.</p> <p>Independently locate, select &amp; use royalty free online graphics within their own work as appropriate.</p>	<p>Use more advanced tools of a graphics package to edit &amp; manipulate layers, retouch/remove objects, isolate colours &amp; edit transparency levels within an image.</p> <p>Use either a bit-map or vector based graphics package as appropriate to generate an image for a particular purpose e.g. planning a new housing estate.</p> <p>Create QR codes to link with suitable online resources and use appropriately within their own documents/presentations.</p> <p>Upload suitable images &amp; documents to secure 'cloud' online storage areas e.g. the school Learning Platform selecting appropriate sharing rules.</p>
<b>PUBLISHING &amp; PRESENTING</b>	<p>Sequence graphics to retell a simple narrative using a pre-prepared template.</p> <p>(Literacy, Physical Development, <i>UW Technology</i>)</p>	<p>Combine text &amp; graphics to sequence/re-tell a simple narrative using a pre-prepared document/presentation template.</p>	<p>Plan, design &amp; insert a range of suitable text &amp; graphics into a document/linear presentation for a particular purpose &amp; audience.</p> <p>Use font colour, size &amp; style, in addition to slide layout, animations &amp; transitions appropriately for desired presentation effects.</p> <p>Create, export &amp; publish graphical slideshows for an identified purpose &amp; audience.</p>	<p>Plan and produce a non-linear presentation for an identified audience which contains a broad range of text &amp; graphics and clear links between content/slides/pages/navigation and the needs of the end-user.</p> <p>Create &amp; publish e-books for a particular purpose &amp; identified audience.</p>