

Computing Progression in Key Skills

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| Year Group | Key Skills |
| Year 1 | On a range of devices, develop correct use of the keyboard, navigate around text in a variety of ways and make simple changes to text e.g. colour, style and size  Refine the use of graphics packages (2Simple, Paint) and talk about their use of and their choice of tools  Be able to listen to and to select a sound from a bank of pre-recorded sounds and use sound recorders to record and playback sounds  Use simple graphing software to produce pictograms and other basic tables, charts or graphs  Sort and classify a group of items by asking simple yes / no questions.  Locate specific, teacher defined, age appropriate websites through a favourites menu and/or by typing a website address (URL) into the address bar  Use technology to source, generate and amend ideas and talk about how they use technology to do this  Contribute ideas to class and group emails and talk openly about their use of online communication  Give and follow commands (one at a time) to navigate other children and programmable toys around a course or a familiar journey, including straight and turning movements.  Plan, generate and follow a sequence of instructions (actual and on-screen) to make something happen; or complete a given task or problem to create a simple program.  Explore simulations of real and virtual environments e.g. BBC science clips, virtual plants and pets. |
| Year 2 | On a range of devices, word process short texts directly onto the computer and select appropriate images to add to work  Save and store work in an appropriate area, organise and name files appropriately and accurately and be able to print, retrieve and amend files  Create a sequence of images to form a short animation  Discuss use of simulations, talk about the rules and compare with reality, e.g. a simulation of a science experiment.  Plan, generate and follow a sequence of instructions to make something happen; or complete a given task or problem to create a simple program.  Make predictions, identify errors in instructions and describe the effects when creating programs and controlling devices.  Use logical reasoning to predict what will happen in simple programs.  Use software to explore, create, edit, save and share sound recordings for a purpose  Contribute to a blog, journal or forum eg. Pobble, Seesaw  Use a branching database program to sort and identify items  Use basic search tools in a prepared database to answer simple questions  Use key words to search a specific resource for information and be able to retrieve files from a computer using a search  of the computer |
| Year 3 | Use different font sizes, colours and effects to communicate meaning for a given audience  Use various layouts, formatting, graphics and illustrations for different purposes or audiences  Use cut, copy and paste to refine and re-order content  Use and combine internet services such as those that provide images, sounds, 3D representations and graphic software.  Use a range of devices to capture and /or download still and moving images for a purpose  Be able to use basic tools in a software package to change images according to purpose  Use a variety of devices and software to locate, select, playback and record voice and other sound  Create frequency diagrams and graphs to answer questions  Collect data and enter it into a database under appropriate field headings  Develop specific key questions and key words to search for information  Use a range of digital tools to communicate, e.g. contributing to chats and/or discussion forums (Pobble, Seesaw)  Begin to publish their work to a wider audience (Pobble, Seesaw)  Write programs that accomplish specific goals and use logical reasoning to predict outputs and detect and correct errors in programs  Design programs, showing skills needed to plan and implement a task/problem that accomplish specific goals |
| Year 4 | Combine and use various software tools to complete a project, problem or task  Use appropriate editing tools to ensure their work is clear and error free, e.g. spell checker  Create a range of hyperlinks and produce a non-linear, interactive presentation  Through self and peer assessment, analyse and evaluate presentations and projects so that suitable improvements can be added to work  Use various tools in paint packages or photomanipulation software to resize, edit and apply special effects to images  Select, import and edit existing sound files in sound editing software (eg. Garageband) to experiment with capturing, repeating and sequencing sound patterns  Use ICT to create and perform sounds or music that would otherwise not be possible in a live situation, e.g., editing a multi-part piece  Create and use a branching database to organise and analyse information to answer questions  Select and use the most appropriate method to organise and present data  Use dataloggers to capture, record and analyse data continuously over time, including sound, temperature and light  Use a range of child friendly search engines to locate different media, e.g. text, images or sound  Use strategies to verify the accuracy and reliability of information, distinguishing between fact and opinion, e.g. cross checking with different websites or books  Use appropriate tools to save and retrieve accessed information, e.g. through the use of favourites, history, copy/paste and save as  Develop use of more advanced searching techniques, e.g., searching for a phrase using quotation marks to locate precise information  Use a range of digital tools to communicate, e.g. contributing to chats and/or discussion forums |
| Year 5 | Select, use and combine internet services to create digital ‘content’ using a range of digital devices  Develop the use of hyperlinks to produce more effective, interactive, non-linear presentations  Make effective use of transitions and animations in presentations.  Independently select, process and import images, video and sounds from a variety of sources to enhance work.  Through peer and self assessment, evaluate presentations and make improvements.  Design and create a short animated sequence  Independently select and use a variety of devices to record musical and non-musical sounds  Create their own sounds and compositions to add to presentations, animations and films.  Construct, refine and interpret bar charts, scatter graphs, line graphs and pie charts.  Solve complex enquiries involving selecting, processing and presenting data; drawing conclusions  Present data to a specified audience and display findings in other software, e.g. through presentation software.  Use a datalogger to make and record accurate measurements or observations  Choose the most appropriate search engine for a task and be able to create and use folders within lists of book-marks or favourites to organise content.  Independently, and with regard for Online Safety, select anduse appropriate communication tools to solve problemsby collaborating and communicating with others withinand beyond school  Use strategies and acquired search skills to question and verify the accuracy and reliability of information, distinguishing between fact and opinion, e.g. cross checking with different websites or books.  Design and create programs using decomposition repetition and selection.  Use logical reasoning to develop systematic strategies that can be used to debug algorithms and programs |
| Year 6 | Demonstrate awareness of intended audience in work when creating digital content  Routinely evaluate and improve work as part of the design process.  Use of hyperlinks to produce more effective, interactive, non-linear presentations.  Develop consistency across a document - same style of font, colour, body text size, etc  Format and edit work to improve clarity and purpose using a range of tools, e.g. cut and paste, justify, tabs, insert and replace.  Upload and download projects to other devices and online space e.g. VLE, blog or website, collaborating and communicating with audiences in locations beyond school.  Create their own sounds and compositions using ICT to add to presentations, animations and films for a specific purpose.  Design questions and perform complex searches using key words, to search a large pre-prepared database looking for relationships and patterns, e.g. data on the Internet; census data  Compare different charts and graphs and understand that different ones are used for different purposes.  Select and use the most appropriate method to organise present, analyse and interpret data.  Choose to use the internet when appropriate as a tool for independent research, e.g., gathering text, images, videos and sound as resources to use in their own work.  Apply their knowledge of what to do and who to tell if they discover something inappropriate or offensive on a website, at home and in school.  Extend online publishing to a more global audience, making use of webcams and /or video conferencing  Use appropriate strategies for finding, critically evaluating, validating and verifying information, e.g., using different keywords, skim-reading to check relevance of information  Distinguish between fact and opinion and make informed choices about the sources of online information used to inform their work.  Design programs to accomplish specific tasks or goals using all computational skills including algorithm design. debugging, decomposition and variables.  Use programming software to create simulations. |