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| Computing enquiry | Computers and using computers | E-Safety | Coding | Networks | Net searching | Vocabulary  |
| * design and write programs to solve problems
* use sequences, repetition, inputs, variables and outputs in programs
* detect and correct errors in programs
* understand uses of networks for collaboration and communication
* be discerning in evaluating digital content
* Use more advanced keyboards (ctrl b, u, a, l, e, r, f)
* Use scaling options when printing work
* Choose the appropriate quality of a print
* Know how to debug (problem solve) computer start up errors
* Adjust screen resolution
* Annotate work using print screen and auto shapes (arrows) to evaluate and justify appropriate use of ICT for the purpose and audience
* Use appropriate computing vocabulary (variable)
* To confidently use touch type
 | * independently select, use and combine a variety of software to design and create content for a given audience, including collecting, analysing, evaluating and presenting data and information
* design and create a range of programs, systems and content for a given audience
* independently select, use and combine a variety of software to collect, analyse, evaluate and present data and information
 | * use technology respectfully and responsibly
* identify a range of ways to report concerns about content and contact in and out of school
 | * include use of sequences, selection and repetition with the hardware used to explore real world systems
* solve problems by decomposing them into smaller parts
* create programs which use variables
* use variables, sequence, selection and repetition programs
* use logical reasoning to explain how increasingly complex algorithms work and to detect and correct errors in algorithms and programs efficently
 | * understand how computer networks enable to computers to communicate and collaborate
* begin to use internet searches within his/her own creations to share and transfer data to a third party
 | * use filters in search technologies effectively and is discerning when evaluating digital content
 | Algorithm, digital, devices, computer, computing, logical, organise, store, retrieve, data, online safety, programme, programs, reasoning, create, open, print, keyboard controls, benefits, personal information, simple, code, debug, achieve, networks, folder, cut, copy, paste, input, output, software, design, networks, search technologies, mouse pad, scroll, click, menu tabs, cameras, sensors, combine software, responsibly, concerns, decompose programs, correct errors, rankings and ranked, sequences, repetition, inputs, variables, outputs, collaborations, evaluations, content, filtering, USB, USB port, cell, data, share,Repetition, errors, communication, resolution, touch type.  |
| Challenge* Can incorporate graphics where appropriate, using the most effective text wrapping formats?
* Can conduct a video chat with more than one person at a time?
* Can compare the information provided on two tabbed websites looking for bias and perspective?
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| Knowledge and understanding E-safety | Algorithms and programs | Data retrieving and organising | Communicating  | Using the internet | databases | Presentation  |
| * Discuss the positive and negative impact of the use of ICT
* Understand the potential risk of providing personal information online
* Know that it is unsafe to arrange to meet unknown people online
* Know that content put online is extremely difficult to remove
* Follow the school’s safer internet rules
 | -Explain how an algorithm works-Detect errors in a program and correct-Use an ICT program to control number of events for an external device-Use ICT to measure sound, light or temperature using sensors and interpret Data.-Explore ’what if’ questions by planning different scenarios-Use input from sensors to trigger events* Check and refine a series of instructions
 | -explore the menu options and experiment with images (colour effects, options, snap to grid etc-add special effects to alter the appearance of a graphic-‘save as’ gif or ipeg, wherever possible to make the file size smaller-make an information poster using their graphics skills to good effect | -conduct a video chat with people in another country or organisation | -contribute to discussions online-use a search engine using keyword search-use complex searches using such as ‘+’ ‘OR’ “find the phrase in inverted commas” | -collect live data using data logging equipment-identify data error, patterns and sequences-use the formulae bar to explore mathematical scenarios-create their own database and present information from it | -present a film for a specific audience and adapt same film for a different audience-create a sophisticated multimedia presentation-confidently choose the correct page set up option when creating a document-confidently use text formatting tools, including heading and body text-use the ‘hanging indent’ tool to help format work where appropriate |
| Culture capital |
| CommunicationSafety onlineOpportunities for inclusion through technology use |