**Computing Skills KS2** 

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| Year 3/4 | Area | Key skills Progression |
|  | Computers | * recognise familiar forms of input and output devices and how they are used * make efficient use of familiar forms of input and output devices * with support select and use a variety of software to accomplish goals * use other input devices such as cameras or sensors * with support select and use a variety of software on a range of digital devices * with support select, use and combine a variety of software on a range of digital devices to accomplish given goals |
|  | E safety | * use technology safely and respectfully, keeping personal information private * use technology safely and recognise acceptable and unacceptable behaviour * use technology responsibly and understand that communication online may be seen by others * understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies |
|  | Coding | * design, write and debug programs that control or simulate virtual events * use logical reasoning to explain how some simple algorithms work * decompose programs into smaller parts * use logical reasoning to detect and correct errors in algorithms and programs * select, use and combine a variety of software, systems and content that accomplish given goals |
|  | Networks | * understand that computer networks enabling the sharing of data and information * understand that the internet is a large network of computers and that information can be shared between computers * understand what services are and how they provide services to a network |
|  | Net searching | * use simple search technologies * use simple search technologies and recognise that some sources are more reliable than others * understand how results are selected and ranked by search engines |
| Year 5/6 | Area | Key skills progression |
|  | Computers | * independently select and use appropriate software for a task * independently select, use and combine a variety of software to design and create content for a given audience 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 |
|  | E safety | * understand the need to only select age appropriate content * use technology respectfully and responsibly * identify a range of ways to report concerns about content and contact in and out of school |
|  | Coding | * design, input and test an increasingly complex set of instructions to a program or device * design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems design, write and test simple programs that follow a sequence of instructions or allow a set of instructions to be repeated * design, write and test simple programs with opportunities for selection, where a particular result will happen based on actions or situations controlled by the user * use logical reasoning to explain how increasingly complex algorithms work to ensure a program’s efficiency * 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 efficiently |
|  | Networks | * begin to use internet services to share and transfer data to a third party * understand how computer networks enable computers to communicate and collaborate * begin to use internet searches within his/her own creations to share and transfer data to a third party |
|  | Net searching | * use filters in search technologies effectively * use filters in search technologies effectively and appreciate how results are selected and ranked * use filters in search technologies effectively and is discerning when evaluating digital content |

