**Skill Progression: Computing**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Year 1** | **Year 2** | **Year 3** |
| **Computing** | I can use a systematic approach to control and predict the behaviour of simple programs (e.g control a roamer)I can recognise common uses of information technology beyond schoolI can identify simple mistakes in my work and evaluate and correct themI am working towards the Key Stage 1 Key Skills listI know to keep personal information privateI know where to go for help and support when I have concernsI am able to navigate age appropriate websites | I can understand that an algorithm is a step by step guide to achieving a goalI can give unambiguous instructions to a digital device to achieve a goal **(e.g. controlling a roamer to reach a given destination)**I can create and debug (correct/improve) simple programs **(e.g. use a roamer)**I can use technology purposefully to create, organise, store, manipulate and retrieve digital content **(e.g. opening, editing and saving a document)**I can make basic evaluations of my work and thinks of ways to improve itI have completed the majority of the Key Stage 1 Key Skills listI can understand the need to keep passwords safeI can start to identify concerning behaviour onlineI can use the internet purposefully to achieve a goalI know that not everything online is true | I can identify a range of ways to report concerns about content and contactI can understand ways in which people communication online and the potential danger **(including devices such as Xbox and other online gaming)**I can use internet to undertake purposeful researchI have awareness of copyright issues around images found onlineI recognise that some algorithms rely upon a strict order to work **(e.g. using sequencing and repetition with a roamer)**I can use various inputs **(e.g. keyboard presses)** and outputs **(e.g. playing a sound)** to control a computer program **(e.g. control a Scratch program with a keyboard input)**I can explain how a program worksI can identify errors or improvements in a program that I have createdI can evaluate different aspects of my work and identify next stepsI can work with a partner to suggest areas of improvement in our workI am starting to work on some of the Key Stage 2 Key Skills List |
| **Year 4** | **Year 5** | **Year 6** |
| I understand the function of a search engine and understand the importance of using the correct search termsI am beginning to understand the concept of plagiarismI can think about the risks of sharing personal information online **(including photographs)** and understand the idea of a digital footprintI can design, write and debug **(e.g. correct/improve)** programs that accomplish specific goals **(e.g. using software to simulate physical processes or control physical objects)**I can solve problems by breaking them into smaller partsI can use logical reasoning to explain how some more complicated algorithms **(e.g. a sequence of instructions)** work I can detect and correct errors in algorithms and programsI can understand the opportunities that networks offer for communication and collaboration **(e.g. working on shared documents)** | I understanding that information found online is not always true and unbiasedI am starting to develop skills in identifying the origin of websiteI can think critically about the information that I put onlineI understand the difference between a computer network and the internetI understand what a network is and how it links devices I can use networks for communication and collaboration **(e.g. working on shared documents)**I can test my work with peers in order to evaluate and improve itI have completed the majority of the Key Stage 2 Key Skills listI can design, write and debug algorithms to solve real world problems using physical or digital devices | I understand plagiarism, copyright and the concept of data protectionI can design and create a program and debug it by collecting data and feedback from a group I can independently select and use software to achieve a goalI can collect, analyse, evaluate and present data and information using a digital device I can select and combine a variety of software to achieve a long term goal **(e.g. select software to plan, design, select, present, analyse, evaluate, improve and report on a long term project)**I can evaluate feedback from a range of sources and a wider group of peersI can confidently and independently use skills on the Key Stage 2 Key Skills ListI can design, write and debug programs and algorithms that respond to and learn from inputs |