|  |
| --- |
| **2015-2016 Computing Curriculum: Key Stage 1 Year One Year Two** |
|  | **Remember** | **Understand** | **Apply** | **Analyse** | **Evaluate** | **Create** |
| **Computer Science** | I know what an algorithm isI know what a computer program isI know what it means to run a programI know what a “bug” isI know what it means to debug a program | I can explain the steps in a simple algorithmI can explain how a computer follows an algorithmI can explain why debugging is usefulI can tell when a program runs correctly or has an error | I can follow an algorithm without a computerI can run a programI can use a program to solve a problemI can use a debugger to step through a program | I can break a problem down into smaller stepsI can spot an error in algorithmI can find a bug in a program | I can compare different algorithms in terms of speed and how easy they are to followI can predict how a computer program will behaveI can argue what problems are best solved by either computer programs or humans | I can write an algorithm on paperI can fix a bug in a programI can write a simple program |
| **Information Technology** | I know what a file isI know what a computer is | I can explain why it can be useful to use a computer | I can use a computer to create a file (document / presentation / picture etc…)I can save my work on a computerI can organise my files on a computerI can open work on a computerI can edit my work on a computer | I can list jobs done by a computer inside schoolI can list jobs done by a computer outside of school | I can say when it’s better to use a computer and when it’s better not to. | I can create something useful on the computer |
| **Digital Literacy** | I know the difference between private and publicI can list some dangers of using the Internet | I can explain why it’s important to be safe onlineI can describe what information should be kept private | I can use a computer safely I can use the Internet without giving away private informationI can send a message using a computer without upsetting anyone | I can recognise something online as bad or wrongI can recognise something online as good or helpful | I can say how my school could make its students safer onlineI can say how my family could be safer online | I can tell people what they can do if they see anything bad online |

|  |
| --- |
| **2015-2016 Computing Curriculum: Key Stage 2 Year three Year four Year five Year six** |
|  | **Remember** | **Understand** | **Apply** | **Analyse** | **Evaluate** | **Create** |
| **Computer Science** |  I know what sequence means I know what selection means I know what the Internet is I know what a network is I know what an algorithm is I know what a program is I know what debugging is I know what repetition means I know what computer control means I know what a variable is I know what simulation means I know what a physical system is |  I can explain the difference between input and output I can give some examples of what algorithms can be used for I can explain why programs need to be tested and debugged I can explain why computers are sometimes used to control things I can explain why computers are sometimes used to simulate things |  I can follow a sequence of instructions I can make a decision based on a selection instruction I can repeat something a certain number of times I can use a variable to keep track of something (e.g. counting) I can design a program on paper  I can split a problem into smaller parts I can use a program to control a gadget  I can use a program to simulate a physical system |  I can tell when an algorithm has worked or not I can explain how an algorithm works I can run a program I can spot when a program goes wrong |  I can compare two different algorithms that do the same thing in different ways I can debug a program to fix a problem I can explain the strengths and weaknesses of using a simulation compared the real thing |  I can write my own algorithm I can fix an error in an algorithm I can write my own programs I can write a program that controls a gadget I can make a simulation of a physical system |
| **Information Technology** |  I know what communication is I know what collaboration is I know what data is I know what information is I know what software is I know what searching the Internet means I know what relevant means |  I can explain the difference between data and information I can choose which program to use to make a piece of work  I can explain what the Internet can be used for I can explain how the Internet lets people communicate I can explain how the Internet lets people collaborate I can explain why some search results appear higher than others on a search engine |  I can use the Internet to communicate with other people I can use the Internet to collaborate with other people I can use software to create work for a given purpose I can use a computer to collect data I can search for information on the Internet I can ignore information that isn’t relevant |  I can describe what can go wrong when using the Internet to communicate or collaborate I can use a computer to analyse data to show something useful I can work out which search result is the most relevant |  I can evaluate how well a piece of work does what it’s supposed to do I can explain the advantages and disadvantages of using the Internet to communicate |  I can create my own piece of work I can present my work to others using a computer / device I can create advice for others on how to search effectively online |
| **Digital Literacy** |  I know what respectful means I know what responsible means I know what safe means I know how to report unacceptable uses of technology |  I can explain the difference between acceptable and unacceptable behaviour (when using technology) I understand why people need to be safe online I understand why people should be responsible online I understand why people should be respectful online |  I can use technology safely I can use technology in a responsible way I can use technology in a respectful way I can report unacceptable uses of technology |  I can spot acceptable and unacceptable behaviour (when using technology) |  I can evaluate how safe someone’s behaviour is (when using technology) I can evaluate how responsible someone’s behaviour is (when using technology) I can evaluate how respectful someone’s behaviour is (when using technology) |  I can create something that tells people how to stay safe I can create something that tells people how to use technology responsibly I can create something that tells people how to use technology respectfully |

