|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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 |

