**Computing in Upper Key Stage 2**

**Computer Science:**

* I can control or simulate physical systems
* I can use randomness in code for purposeful effect
* I can write code that performs calculations with variables
* I can design, create and test my own programmes in apps

**Information Technology:**

* I can edit video, bringing together different media elements for a specific purpose
* I can collect and analyse different types of data using technology
* I can describe the hardware infrastructure that allows computers and networks to function
* I can explain how network services function, such as the World Wide Web and online storage (clouds)

**Digital Literacy:**

* I can understand the concept of cyber bullying and what to do if I think it is occurring
* I can explain the concept of a ‘digital footprint’ and the problems it can create
* I can use computer networks for communication and collaboration
* I can critically assess and cross-reference digital resources I have found



**Key studies within Computing in Upper Key Stage 2**

**Problem Solving and Logical Thinking**

* Explore ‘What is’ questions by playing adventure or quest games
* Plan a solution to a problem using decomposition (developing a computer game)
* Detect errors in a program and correct them
* Explore ‘what if’ questions by planning different scenarios for controlled devices
* Design, write and debug their own computer control application

**Creative Content**

* Listen, download, produce and upload a variety of broadcast media (e.g. live streaming, podcast)
* Work on simple film editing and present a film for a specific audience
* Make a home page for a website that contains links to other pages
* Prepare and then present a simple film (e.g. Storyboarding and then filming/editing).
* Add special effects to alter the appearance of a graphic
* Make an information poster using graphics skills to good effect

**Making Things Happen**

* Adapt and modify programs and add refinements
* Use simulations to explore patterns and relationships
* Make predictions about what might happen in a game program
* Add special effects to work

**Networks and the Internet**

* Conduct a safe internet search and refine it for both speed and accuracy
* Know how to distinguish between good and bad information found on the internet
* Extrapolate the best information and summarise it using ICT
* Rank information found on the internet in order of importance and relevance

**Using ICT**

* Capture sound, still and video images using a range of hardware
* Save documents and images into different formats and folders for different purposes
* Decode and debug algorithms to make a program more effective or efficient

**Digital Literacy**

* Download a document and save it to the computer
* Decide which sections are appropriate to copy and paste from at least two web pages
* Confidently choose the correct page set up option when creating a document
* Use complex searches using such as ‘+’ ‘OR’ ”Find the phrase in inverted commas”