National Curriculum Aims

-Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.

-Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.

-Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.

-Are responsible, competent, confident and creative users of information and communication technology.

National Curriculum Subject Content

-Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions

- create and debug simple programs

-use logical reasoning to predict the behaviour of simple programs

-use technology purposefully to create, organise, store, manipulate and retrieve digital content

-recognise common uses of information technology beyond school

-Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Information Technology

Laptop skills and Word Processing	Presentations, Web Design and eBook Creation	Video Creation	Data Handling
-Can use the space bar only once between words and use touch to navigate to a word/letter to edit -Can use caps lock for capital letter -Can dictate longer passages into a digital device with accurate punctuation. -Can log on to a laptop and open programmes. -Can use keyboard skills such as basic punctuation and capital letters. -Can save a piece of work.	-Can add voice recordings to a storyboard -Can import images to a project from the internet or camera roll -Can add speech bubbles to an image to show what a character thinks (balloon stickies+)	-Can search for an image, save it to the ipad and upload into Chatterpix or the Green Screen.	-Can sort objects into a range of charts such as Venn Diagrams, Carroll Diagrams and bar charts using different apps. -Can record themselves explaining what data show them

Computer Science

Computational Thinking and Coding/ Programming	Computer Networks
-Understand that code is a set of instructions (an algorithm) given to a computer or machine. -Understand that sequences can have mistakes in them and that these mistakes in computing are known as 'bugs' -Recognise bugs (mistakes) in code and can go back to check algorithms. -Can use scratch to repeat, use sound and text and to turn left or right.	

Digital Literacy

Self Image and Identity	Online relationships	Managing online information	Health and Wellbeing	Privacy
-Can explain how people online maybe different to their real life identity. -Give examples of what might make them feel upset and examples of how to get help	-Can give examples of how they might use technology to communicate with others they don't know well. (eg emailing another school) -Can give examples of bullying behaviour online and understand how this might make someone feel. -Can talk about how to get help if being bullied online or in person. -Can explain how information put online can last for a long time. -Know who to talk to if they think a mistake has been made about putting something online.	-Can create a basic image search. -Know how to navigate web pages (forwards, backwards, links, tabs) -Can talk about how voice activated searching may be used. -Know that all information found online may not be true.	-Know the dangers that electronic devices can present and what to do if they face any of these. (e-safety poster) -Can explain simple rules for using technology in different places (not whilst driving etc)	-Know that content online may belong to other people.