Eagles		
KS2 POS	● Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. ● Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. ● Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. ● Understand computer networks including the internet; how they can provide multiple services, such as the world Wide Web; and the opportunities they offer for communication and collaboration. ● Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. ● Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given.	

Unit of work	Knowledge	Skills
Bletchley Park 1 and 2	● Learn about the history of computers and how they have evolved over time. ● Using the understanding of historic computers to design a future computer. ● Understand why codes might be valuable ● Identify some common secret codes ● Understand why it's important to have a secure password and how to create a two-step authentication.	● Write a message using a secret code ● Create a Google Site with information about Bletchley Park ● Present information using a presentation software. ● Create and edit sound recordings for a specific purpose.

	● know some of the people who contributed to computing history ● Identify what some historical achieved	● Create and edit videos adding multiple elements: music, voiceover, sound, text, transitions to create a video advert. ● Using design software Tinker with CAD to design a product.
Into to Python	● Know why we use loops ● Explain how a nested loop works ● Explain what a loop is based on prior learning ● Suggest an appropriate place to use a loop	● Use and adapt nested loops ● Programming using the language Python. ● Changing a programme to personalise it. ● Evaluating code to understand its purpose. ● Predicating code and adapting it to a chosen purpose. ● Decomposing a programme into an algorithm. ● Write increasingly complex algorithm for a purpose.
Big Data 1	● Understand how barcodes, QR codes and RFID work. ● Explain how infrared light can be used to transmit data ● Know how there are different types of data transmissions included in the electromagnetic spectrum ● Understand that infrared can be blocked easily as it has a short wavelength.	● Collate information ● Draw conclusions from the data set. ● Sort data within an Excel spreadsheet by inserting a table ● Compare data across columns using Freeze Panes.

	● Recognise how RFID can be used to solve some data challenges in transportation and logistics	
Big Data 2	● Recognise that updated software can help to prevent data corruption and hacking. ● Recognise differences between WiFi and mobile data. ● Identify the meaning of the term 'Internet of Things' ● Learn about the internet and things that have led to 'big data' ● Learn how 'big data' can be used to solve a problem or improve efficiency.	● Gather and analyse data in real time. ● Create formulas and sorting data within spreadsheets. ● Apply Big Data/IoT principles to solve a problem ● Research the technology associated with solving the problem ●
Skills Showcase	● Know that programs are designed for a specific purpose. ● Understand the inputs and outputs needed for a product ● Understand how to use search technologies effectively ● Define the terms 'opinions', 'facts', influence', 'manipulation' and 'persuasion' and how they are used in advertisements	● Evaluate code and understand what it does ● Use and adapt existing to code to design a product ● Use sequence, selection, repetition, variables or inputs and outputs within my program ● Debug quickly and efficiently to make a programme more efficient. ● Use CAD software to create shape. ● Create an appealing website for my product

		● Alter websites code to create change. ● Record a video or take photos of a product and then edit.