Year 5/6 Autumn 1 Computing Systems & Networks

Prior Learning
Computing systems and networks: Search engines

Key vocabulary for this unit	
Acrostic Code	Date shift cipher
Brute force hacking	Discovery
Caesar cipher	Hero
Chip and pin system	Invention
Cipher	Nth Letter Cipher
Code	Password
Combination	Pig Latin
Contribute	Pigpen cipher
Convince	Present
Technological advancement	Scrambled
Trial and error	Secret
	Secure

Learning Sequence	
Secret Codes	To understand there are many different types of secret codes.
Brute force hacking	To understand the importance of having a secure password.
Bletchley Park	To understand the importance of Bletchley Park to the World War II war effort.
Computing heroes	To research historical figures that contributed to technological advances in computing.
Computing heroes part 2	To research and present information about historical figures in computing.

Assessment milestones	
Key skills:	**Key knowledge:**

- Learning about the history of computers and how they have evolved over time.
- Using past experiences to help solve new problems.
- Writing increasingly complex algorithms for a purpose.
- Debugging quickly and effectively to make a program more efficient.
- Remixing existing code to explore a problem.
- Changing a program to personalise it.
- Evaluating code to understand its purpose.
- Predicting code and adapting it to a chosen purpose.
- Using search and word processing skills to create a presentation.
- Understanding how search engines work.
- Understanding the importance of secure passwords and how to create them.
- Using search engines safely and effectively.

- To understand the importance of having a secure password and what "brute force hacking" is.
- To know that the first computers were created at Bletchley Park to crack the Enigma code to help the war effort in World War 2.
- To know about some of the historical figures that contributed to technological advances in computing.
- To understand what techniques are required to create a presentation using appropriate software.