

I should already know:

- 1 How to access and explore Scratch.
- 2 How to create Scratch animations.
- 3 techniques for debugging programs.

Questions I will be able to answer by the end of the unit:

- 1 Why do people use ciphers?
- 2 What makes a safe password?
- 3 How do I know if a website is secure?



By the end of the unit, I will:

- 1 send and receive **messages** using **Morse** and **semaphore**.
- 2 **encrypt** and **decrypt** messages using the Caesar and substitution ciphers
- 3 recognise the importance of keeping passwords entirely secret
- 4 recognise the need for encryption when using the Internet.

Key Vocabulary

1	Cipher:	an agreed scheme (algorithm) for encrypting or decrypting a message
2	Codes:	ways of changing the way information is represented
3	Cryptography:	the science of keeping communication and information secret
4	Decrypt:	to convert an encrypted message into readable text
5	Encode:	to change the form of a message into an agreed code
6	Encrypt:	to convert a readable message into an encrypted form so that it cannot be read by those without the key
7	Message:	information to be transmitted from one person (or system) to another
8	Morse code:	a simple code for converting letters and numbers into patterns of short and long electrical pulses
9	Semaphore:	a simple code for converting letters and numbers into different positions of two flags, one held in each hand
10	Transmit:	to communicate a message over a long distance