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Features



# Exploring the Enigma

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## Cryptography terminology

**Plaintext:** Everyday language; e.g. "This is plaintext"

**Ciphertext:** Enciphered language; e.g. "rgua ua xuogwerwzr"

A **code** is a system of secret communication in which each word in a message is replaced with another word, letter, sentence or symbol. For example:

**Plaintext:** British won (the) battle (at Alam Halfa)

**Ciphertext:** Dog ate rabbit

A **cipher** is a system of secret communication in which each letter in a message is replaced with another letter, word sentence or symbol. For example:

**Plaintext:** s h i p s s a i l e d t o d a y

**Ciphertext:** r g h o r r z h k d c s n c z x

There are two parts to every cipher, and in order to decipher messages you must know both parts:

$$\text{Cipher} = \text{Algorithm} + \text{Key},$$

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where an "algorithm" is a general method of encryption, for example, "swap every letter for a symbol", or "jumble up all the letters in a word", and a "key" is the particular way a message has been enciphered that time, for example, "replace A by \$, B by or "move the last letter of every word to the front".

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