## KNOWLEDGE ORGANISER :: BUILD AN ENIGMA MACHINE

## **KEY TERMS**

**PERSONAL DATA** is data about yourself that someone can use to identify who you are or contact you. Your name and mobile number are examples of personal data.

**PRIVATE DATA** is data about you that you don't want everyone to know about. Your hobbies or clubs that you are members of are examples of private data.

**SENSITIVE DATA** is data about you that only certain people need to be able to see or know about. Your medical history or school grades are examples of sensitive data.

**ENCRYPTION** is name given to the process of converting data into a secret code that can only be understood if you know the key.

**DECRYPTION** is the name given to the process of converting encrypted data (called a **Ciphertext**) back into unencrypted text (called **Plaintext**).

A **CIPHER** is an algorithm to encrypt plaintext so it can be kept secret. Data can be encrypted and decrypted using cyphers.

## The message is written in plaintext

The message is encrypted into cyphertext using the key

he cyphertext is sent

The cyphertext is received

The cyphertext is decrypted back into plaintext using the key

## PLAINTEXT AND CIPHERTEXT

Plaintext	А	В	С	D	E	F	G	Н	Ι	J	К	L	М	Ν	0	Ρ	Q	R	S	Т	U	V	W	Х	Y	Z
Ciphertext	D	Ε	F	G	Н	Ι	J	Κ	L	М	Ν	0	Ρ	Q	R	S	Т	U	۷	W	Х	Y	Ζ	А	В	С