What is the process called that converts plaintext into ciphertext?

Encryption

What is a cipher?

An algorithm used to encrypt and decrypt text

What is a ceasar cipher and how does it work?

A substitution cipher that shifts characters a certain number of positions in the alphabet

What is the process called that decrypts a message without knowing the cipher or the key used to encrypt it?

**Cryptanalysis**

Which key is used to decrypt the message?

Private Key

Which key is distributed freely?

Public Key

Why is a digital signature used for?

To ensure the authenticity of the message

Why do you think encryption is necessary?

Encryption is a vital thing in our lives. It is necessary to ensure no one can sniff the network for packets that contain your credit card number. As if there was no encryption your credit card number would be in the hands of the criminal

Do you think software companies should create backdoors for encryption to allow law enforcement to gain access to data for criminal investigations?

No, our information is private. No governing body should have the keys to our software. If there is a backdoor it will be found.