

Understanding Codes and Ciphers

Codes & Ciphers · Answer Key · 8 Questions

1. Which type of cipher substitutes each letter of the plaintext with a different letter or symbol, maintaining a consistent mapping throughout the message?

- A) Transposition cipher
- B) Substitution cipher**
- C) Polyalphabetic cipher
- D) Code

2. The Caesar cipher is a simple example of what type of cipher?

- A) Polyalphabetic cipher
- B) Transposition cipher
- C) Monoalphabetic substitution cipher**
- D) Vigenère cipher

3. In cryptography, what is the term for the original, unencrypted message?

- A) Ciphertext
- B) Algorithm
- C) Plaintext**
- D) Key

4. The Enigma machine, famously used by Germany during World War II, employed a complex form of which type of cipher?

- A) Monoalphabetic substitution
- B) Polyalphabetic substitution**
- C) Transposition
- D) Steganography

5. What is a 'key' in the context of cryptography?

- A) The method used to encrypt the message
- B) The original message before encryption
- C) The secret information used to decrypt or encrypt a message**
- D) The resulting encrypted message

6. A simple transposition cipher rearranges the order of letters in a message without changing the letters themselves. Which of the following is an example of this?

- A) Atbash cipher
- B) Scytale cipher**
- C) Caesar cipher
- D) Polybius square

7. The Vigenère cipher is a type of polyalphabetic substitution cipher that uses a keyword to determine the shifting of letters. How does it differ from a monoalphabetic cipher?

A) It uses a different substitution alphabet for each letter of the plaintext.

B) It shifts all letters by a fixed number.

C) It rearranges the order of the letters.

D) It encodes letters into numbers.

8. What is the primary goal of steganography?

A) To encrypt a message so it is unreadable without a key.

B) To disguise the fact that communication is happening at all.

C) To scramble the order of letters in a message.

D) To substitute letters with different symbols for a consistent mapping.