

Decoding the Secrets: Codes & Ciphers Adventure

Codes & Ciphers · Answer Key · 25 Questions

1. What is the name of a simple cipher where each letter of the alphabet is shifted by a fixed number of positions?

- A) Substitution Cipher
- B) Caesar Cipher**
- C) Transposition Cipher
- D) Vigenère Cipher

2. In a Caesar cipher, if 'A' is shifted by 3 to become 'D', what would 'X' become?

- A) A**
- B) Y
- C) Z
- D) B

3. What type of cipher involves rearranging the order of letters in a message rather than substituting them?

- A) Polyalphabetic Cipher
- B) Simple Substitution
- C) Transposition Cipher**
- D) Homophonic Substitution

4. The Enigma machine was famously used by which country during World War II to encrypt its messages?

- A) United States
- B) Soviet Union
- C) Germany**
- D) Japan

5. What historical method of communication used a grid and a keyword to write messages, making them harder to decipher?

- A) Morse Code
- B) Pigpen Cipher
- C) Polybius Square
- D) Playfair Cipher**

6. A code where entire words or phrases are replaced by symbols or other words is known as a ____ code.

- A) Substitution
- B) Cipher
- C) Symbol

D) Book

7. What is the term for the study of secret writing and secret communication?

- A) Steganography

B) Cryptography

- C) Ciphrology
- D) Cryptanalysis

8. The Pigpen cipher, also known as the Masonic cipher, uses a grid of symbols based on:

- A) Shapes of animals

B) Letters of the alphabet

- C) Musical notes
- D) Numbers

9. When two or more alphabets are used to encrypt a message, making it more complex than a simple substitution, it is called a ____ cipher.

- A) Monoalphabetic

B) Polyalphabetic

- C) Homophonic
- D) Transpositional

10. What is the name of the process of finding the plaintext from a ciphertext without knowing the key?

- A) Encryption
- B) Decryption

C) Cryptanalysis

- D) Encoding

11. The 'code talkers' of the Navajo Nation used their native language to create an unbreakable code during which major conflict?

- A) The American Civil War
- B) World War I

C) World War II

- D) The Korean War

12. A scytale was an ancient Greek device used for:

- A) Writing with invisible ink
- B) Transposing messages**
- C) Encrypting by substitution
- D) Sending coded signals

13. What is the term for hiding the existence of a message, rather than hiding its content?

- A) Ciphering
- B) Encoding
- C) Steganography**
- D) Code-breaking

14. In a simple substitution cipher, each letter of the alphabet is consistently replaced by another single letter or symbol. This is called a ____ substitution.

- A) Polyalphabetic
- B) Homophonic
- C) Monoalphabetic**
- D) Periodic

15. What famous mathematician is credited with developing a cipher that used a keyword to create a polyalphabetic substitution?

- A) Alan Turing
- B) Leon Battista Alberti**
- C) Charles Babbage
- D) Augustus De Morgan

16. Morse code is a method of transmitting text that uses a series of short and long signals, known as dots and ____.

- A) Lines
- B) Dashes**
- C) Beeps
- D) Pulses

17. The Vigenère cipher is a type of cipher that uses a ____ to encrypt a message.

- A) Single alphabet
- B) Keyword**
- C) Numerical sequence
- D) Grid

18. What is the name of the process of converting plaintext into ciphertext?

- A) Decryption
- B) Cryptanalysis
- C) Encoding

D) Encryption

19. A simple substitution cipher where the key is the standard English alphabet reversed is called:

A) Atbash Cipher

- B) Caesar Cipher
- C) Rail Fence Cipher
- D) Keyword Cipher

20. The practice of hiding a message within another, often innocuous, message is known as:

- A) Code-breaking
- B) Ciphering

C) Steganography

- D) Cryptography

21. The Polybius square is a grid used in a type of cipher where letters are represented by their row and ____ coordinates.

- A) Diagonal

B) Column

- C) Circle
- D) Triangle

22. What is a 'key' in cryptography?

- A) A type of code
- B) The algorithm used for encryption
- C) A piece of information needed to decrypt a message**
- D) The original message

23. The 'breaking' of a code or cipher is called:

- A) Encoding
- B) Encrypting
- C) Cryptanalysis**
- D) Deciphering

24. Which historical cipher is named after a Roman emperor who used a shift of 3?

- A) Atbash Cipher
- B) Caesar Cipher**
- C) Playfair Cipher
- D) Vigenère Cipher

25. In a transposition cipher, the letters themselves are not changed, only their _____ is rearranged.

- A) Meaning
- B) Frequency
- C) Order**
- D) Sound