**ACTIVITY # 9**

**Tipo actividad: Cuestionario**

**Multiple choice activity.**

1. What is the purpose of a consensus mechanism in a cryptocurrency blockchain?

A) To regulate the supply of cryptocurrencies

B) To ensure all miners agree on the next block of transactions

C) To determine the value of each cryptocurrency

D) To validate the identity of cryptocurrency users

1. Which consensus mechanism requires miners to compete against each other to validate the next block of transactions?

A) Proof-of-Stake

B) Proof-of-Authority

C) Proof-of-Capacity

D) Proof-of-Work

1. How does Proof-of-Stake (PoS) differ from Proof-of-Work (PoW)?

A) PoS rewards miners based on the amount of cryptocurrency they hold, while PoW rewards based on computational power.

B) PoS relies on energy-intensive computations, while PoW relies on the amount of cryptocurrency held by miners.

C) PoS involves burning coins periodically, while PoW does not.

D) PoS is primarily used by private organizations, while PoW is used in public blockchains.

1. What is the main advantage of Proof-of-Stake (PoS) over Proof-of-Work (PoW)?

A) Higher energy efficiency

B) Lower transaction costs

C) Faster transaction times

D) Greater decentralization

1. Which consensus mechanism is used by private companies or organizations and relies on reputation and authority for validation?

A) Proof-of-Stake

B) Proof-of-Authority

C) Delegated Proof-of-Stake

D) Proof-of-Activity