

Name _____

Unlocking the Secrets: The Significance of Public and Private Keys in Cryptocurrency

Open-Ended Response Answer Key

1. (Sample answer) Public keys are like cryptocurrency addresses used for receiving funds and providing transparency. They can be shared openly. Private keys, on the other hand, are secret codes that provide access and control over cryptocurrency assets. They must be kept secure to prevent unauthorized access. Public keys facilitate transactions, while private keys validate and secure them.
2. (Sample answer) Potential risks associated with public and private keys in cryptocurrency include the risk of theft or loss of the private key, which could lead to the loss of digital assets. Mitigating these risks involves using secure storage methods like hardware wallets and practicing good online security hygiene.
3. (Sample answer) Decentralization in cryptocurrency means that transactions and control of assets are distributed across a network of participants rather than relying on a central authority. Public and private keys contribute to decentralization by allowing individuals to have direct ownership and control of their digital assets, without the need for intermediaries like banks.
4. (Sample answer) Ownership of cryptocurrency comes with the responsibility of securely managing and safeguarding private keys. Individuals must take precautions to prevent unauthorized access or loss of their keys, such as using hardware wallets, backups, and secure storage. The significance of secure key management lies in protecting one's digital wealth and assets.

