

How Blockchain Technology Powers Crypto currency

The basics.



#### 1. What is Blockchain?

Blockchain is a decentralized digital ledger that records transactions in a secure, transparent, and tamper-proof manner. It consists of:

- Blocks: Data containers storing transaction details.
- Chain: A sequence of blocks linked together using cryptography.
- Nodes: Computers in the network that validate transactions.

## 2. Key Features of Blockchain in Cryptocurrency

- ✓ Decentralization No single entity controls the network; it operates through a distributed system.
- ✓ Immutability Once a transaction is recorded, it cannot be altered.
- ✓ Transparency All transactions are publicly verifiable.
- Security Transactions are secured through cryptographic hashing.

### 3. Why Is Blockchain Important for Cryptocurrency?

- It helps verify transactions without a bank or middleman.
- It prevents cheating, like spending the same cryptocurrency twice.
- It makes transactions fast and safe across the world.

# 4. Examples of Cryptocurrencies Using Blockchain

- Bitcoin (BTC) The first and most popular cryptocurrency.
- Ethereum (ETH) Supports programs called "smart contracts" that run automatically.
- Ripple (XRP) Used for fast and cheap money transfers.

#### Final Thoughts

Blockchain is like a digital record-keeping system that makes cryptocurrency secure, fast, and trustworthy. Without blockchain, cryptocurrency wouldn't exist.

