



What is cryptocurrency?

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Ages 11-18 ⌚ 4 min read

Cryptocurrency is digital money that isn't controlled by any government or bank. It exists only as code on computers around the world, and transactions are verified not by a central authority but by a distributed network of computers all checking each other's work.

The problem it tried to solve

Normal digital money — a number in your bank account — requires you to trust a bank to store it accurately and transfer it honestly. Banks can freeze accounts, governments can inflate currencies, and the whole system requires trust in institutions. Bitcoin, created in 2009 by the anonymous "Satoshi Nakamoto," was designed to enable digital money transfers without needing to trust any single institution.

Imagine instead of one bank keeping everyone's account balances, a copy of every transaction ever made was stored on 10,000 different computers around the world — all constantly checking each other. To fake a transaction, you'd need to simultaneously alter the records on more than half of those computers. That's essentially impossible with enough participants. This distributed ledger is called a blockchain — and it's the core technology under Bitcoin and most other cryptocurrencies.

What is a blockchain?

A blockchain is a record of all transactions, grouped into "blocks" and chained together in order. Each block contains a reference to the block before it (a cryptographic fingerprint called a hash), so altering any old block would break the chain and be obvious to every other computer. New transactions are verified by a network of computers competing to solve a mathematical puzzle — the winner adds the next block and receives newly created cryptocurrency as a reward. This is called "mining."

Why are prices so volatile?

Unlike the pound, which is backed by the UK economy and managed by the Bank of England, most cryptocurrencies have no underlying asset and no managing authority. Their value comes entirely from what people believe they're worth — pure supply and demand, speculation, and sentiment. This creates enormous price swings: Bitcoin has dropped 80% in value multiple times, and surged thousands of percent at other points. It's treated more like a speculative asset than a practical currency by most holders.

Is it actually used as money?

Rarely, for most people. Transactions can be slow and expensive. Prices fluctuate too much to be practical for everyday purchases. Most people who hold cryptocurrency are speculating that it will increase in value — not using it to buy groceries. Some specific use cases do exist — international transfers that bypass expensive bank fees, for instance — but widespread adoption as everyday currency remains limited.