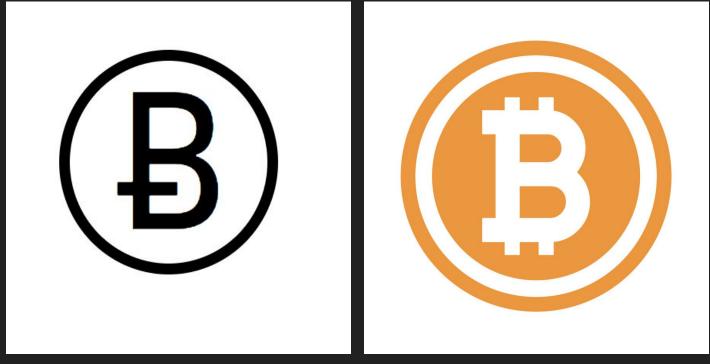
# **Bitcoin & Digital Currency**

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# **Bitcoin symbol / logo**



Bitcoin Symbol

Bitcoin Logo

### **Bitcoin Characteristics**

- Decentralized
- Open source
- Peer to peer
- Easy to use
- Unregulated
- Anonymous yet transparent
- Fast but irreversible transfers

### What is Bitcoin?

• Bitcoin is a consensus network that enables a new payment system and a completely digital money.

• It is the first decentralized peer-to-peer payment network that is powered by its users with no central authority or middlemen.

• Bitcoin is pretty much like cash for the Internet.

## What is Cryptocurrency?

- Bitcoin is the first implementation of a concept called "cryptocurrency", which was first described in 1998 by Wei Dai on the cypherpunks mailing list, suggesting the idea of a new form of money that uses cryptography to control its creation and transactions, rather than a central authority.
- Cryptocurrency is a digital currency in which encryption techniques are used to regulate the generation of units of currency and verify the transfer of funds, operating independently of a central bank.
- https://youtu.be/6Gu2QMTAkEU

### **Who Created Bitcoin?**

- The first Bitcoin specification and proof of concept was published in 2009 in a cryptography mailing list by Satoshi Nakamoto.
- Satoshi left the project in late 2010 without revealing much about himself.
- The community has since grown exponentially with many developers working on Bitcoin.



Satoshi Nakamoto

### Who Control the Bitcoin Network?

- Nobody owns the Bitcoin network much like no one owns the technology behind email.
- Bitcoin is controlled by all Bitcoin users around the world.
- Bitcoin can only work correctly with a complete consensus among all users.
- All users and developers have a strong incentive to protect this consensus.

### **How Does Bitcoin Work?**

- Bitcoin is nothing more than a mobile app or computer program that provides a personal Bitcoin wallet and allows a user to send and receive bitcoins with them. This is how Bitcoin works for most users.
- The Bitcoin network is sharing a public ledger called the "block chain".
- Block Chain contains every transaction ever processed, allowing a user's computer to verify the validity of each transaction.
- The authenticity of each transaction is protected by digital signatures corresponding to the sending addresses, allowing all users to have full control over sending bitcoins from their own Bitcoin addresses.

## Is Bitcoin Really Used?

 Yes. There are a growing number of businesses and individuals using Bitcoin.

 Here are a few major companies that are currently accepting Bitcoin:









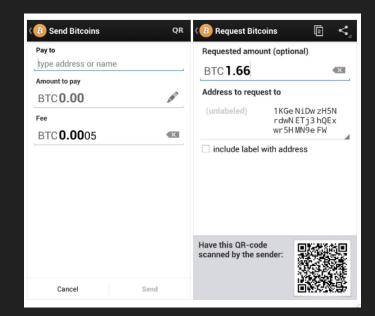


## **How Does One Acquire Bitcoin?**

- As payment for goods or services.
- Purchase bitcoins at a Bitcoin exchange.
- Exchange bitcoins with someone near you.
- Earn bitcoins through competitive mining.
- What is mining?<a href="https://youtu.be/GmOzih6l1zs">https://youtu.be/GmOzih6l1zs</a>

## How Difficult is it to Make a Bitcoin Payment?

- Bitcoin payments are easier to make than debit or credit card purchases, and can be received without a merchant account.
- Payments are made from a wallet application, either on your computer or smartphone, by entering the recipient's address, the payment amount, and pressing send.
- To make it easier to enter a recipient's address, many wallets can obtain the address by scanning a QR code or touching two phones together with NFC technology (Near-field communication)



### What are the Advantages / Disadvantages of Bitcoin?

#### **Advantages**

- Payment freedom
- Choose your own fees
- Fewer risks for merchants
- Security and control
- Transparent and neutral

#### **Disadvantages**

- Degree of acceptance
- Volatility
- Ongoing development

### Why do People Trust Bitcoin?

- Much of the trust in Bitcoin comes from the fact that it requires no trust at all.
- Bitcoin is fully open-source and decentralized. This means that anyone has access to the entire source code at any time. Any developer in the world can therefore verify exactly how Bitcoin works.
- All transactions and bitcoins issued into existence can be transparently consulted in real-time by anyone. All payments can be made without reliance on a third party and the whole system is protected by heavily peer-reviewed cryptographic algorithms like those used for online banking.
- No organization or individual can control Bitcoin, and the network remains secure even if not all of its users can be trusted.

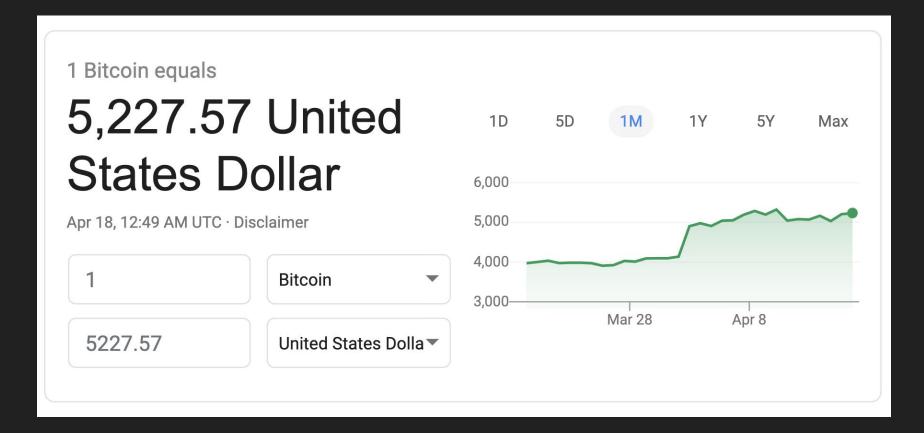
## **Is Bitcoin Anonymous?**

- Bitcoin is designed to allow its users to send and receive payments with an acceptable level of privacy as well as any other form of money.
- Bitcoin is not anonymous and cannot offer the same level of privacy as cash.
- The use of Bitcoin leaves extensive public records. Various mechanisms exist to protect users' privacy, and more are in development.
- Bitcoin is also designed to prevent a large range of financial crimes.

## Is Bitcoin Legal?

- The legal status of bitcoin varies substantially from state to state and is still undefined or changing in many of them.
- The majority of countries do not make the usage of bitcoin itself illegal, its status as money (or a commodity) varies, with differing regulatory implications.
- Some states have explicitly allowed its use and trade, others have banned or restricted it.
- Various government agencies, departments, and courts have classified bitcoins differently.

### **Bitcoin Price**

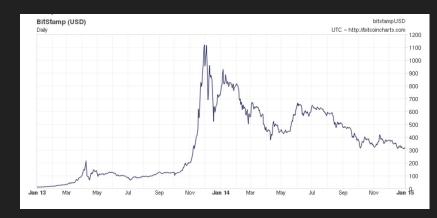


### **What Determines Bitcoin's Price?**

 The price of a bitcoin is determined by supply and demand. When demand for bitcoins increases, the price increases, and when demand falls, the price falls.

 There is only a limited number of bitcoins in circulation and new bitcoins are created at a predictable and decreasing rate, which means that demand must follow this level of inflation to keep the price stable.

 Because Bitcoin is still a relatively small market compared to what it could be, it doesn't take significant amounts of money to move the market price up or down, and thus the price of a bitcoin is still very volatile.



Bitcoin Price Over Time

## **Bitcoin Games**

#### Bitcoin is used in an online games such as:

- BlackJack
- Lottery
- Roulette
- Slots
- Bitcoin-Dice
- Bitcoin-Poker
- Bitcoin-Keno



#### Resources

- https://blockgeeks.com/guides/what-is-cryptocurrency/
- https://bitcoinsymbol.org/
- https://www.google.com/search?ei=sMi3XNjUJYfF0PEPmPu44AM&q=bitcoin+price&oq=+bitcoin&gs l=psy-ab.1.0.0i131i67l2j0i67l2j0i131l2j0i67j0i7i30j0i131i67j0i131.4631.4631.10985
  ...0.0..0.72.72.1.....0....1..gws-wiz......0i71.Mqf 87oatA0
- https://money.cnn.com/infographic/technology/what-is-bitcoin/index.html
- https://en.wikipedia.org/wiki/Bitcoin
- https://bitcoin.org/en/

# **Thank You**