

Introduction To Crypto-Currency

Topics

- 1. **Currency**
- 2. **Types of Consensus**
- 3. **Types of Crypto**
- 4. **Getting Started (Activity 1)**
- 5. **Self-Custody vs Custodial Custody (Activity 2)**
- 6. **Decentralized Finance (DeFi)..... (Activity 3)**
- 7. **Centralized Finance (CeFi)..... (Activity 4)**
- 8. **Technical Analysis / Basic Chart Reading (Activity 5)**
- 9. **Fundamental Analysis / Market Research..... (Activity 6)**
- 10. **Metaverse / Play-To-Earn Gaming (Activity 7)**
- 11. **NFT's (Activity 8)**
- 12. **Taxes (Activity 9)**

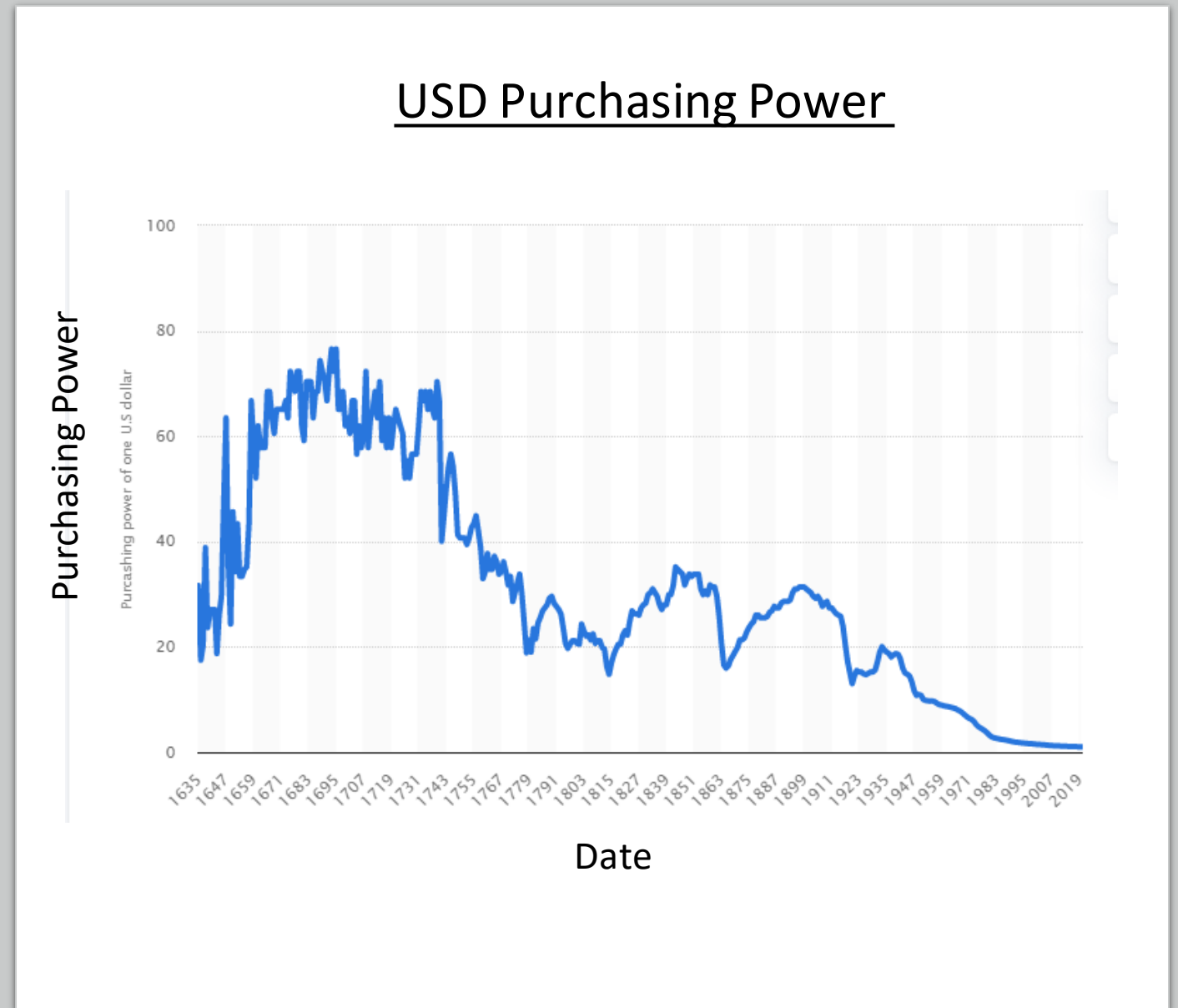
Glossary

- **Cryptocurrency (also referred to as virtual currency and digital currency)** - a digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value. In simple terms, cryptocurrency is electronic money that is not issued or backed by a government or central bank. Units of cryptocurrency are often referred to as "cryptocoin".
- **Bitcoin** - the most popular cryptocurrency on the virtual currency market. Bitcoins have an equivalent value in other currencies, such as the U.S. Dollar, and can be exchanged for U.S. dollars.
- **Alt-coin** - Any cryptocurrency alternative to Bitcoin.
- **Initial Coin Offerings (ICOs)** - Similar in theory to an Initial Public Offering (IPO) of a stock, an ICO occurs when a new cryptocurrency is created and goes on sale to the public.
- **Public Key** - A published key, or an encrypted sequence of 64 letters and numbers, that can be used to send a secure message (or cryptocurrency) to a receiver. The public and private key are both needed to unlock or transfer the cryptocurrency from one user to another.
- **Private Key** - A secret key, or sequence of 64 letters and numbers, that is used to decrypt messages encrypted by a public key. The public and private key are both needed to unlock or transfer the cryptocurrency from one user to another.
- **Cryptocurrency Wallet (also referred to as a digital wallet)** - a software program that stores private and public cryptocurrency keys. Cryptocurrency wallets also enable users to send and receive virtual currency.
- **Blockchain** - An online ledger containing records of every cryptocurrency transaction. The blockchain is public and decentralized, and is maintained by a peer-to-peer network of computers.
- **Air Drop** - A transfer of "free" cryptocurrency from a crypto project into users' wallets.

What is currency and why does it have value?

Currency: Something (such as coins, treasury notes, and banknotes) that is in circulation as a medium of exchange

Value: A fair return or equivalent in goods, services, or money for something exchanged



The value of currency is dependent on two factors scarcity and utility.

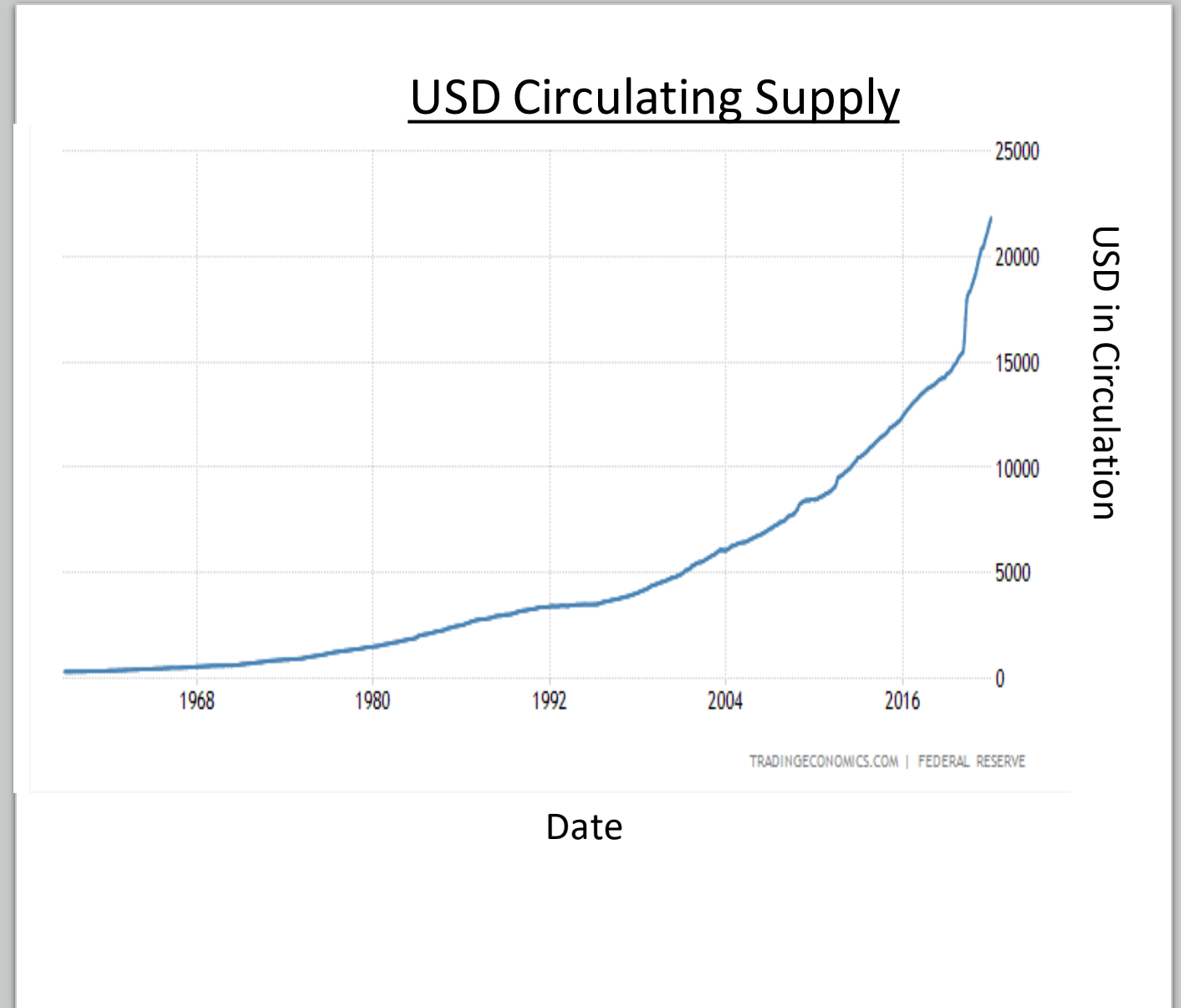
Scarcity

The amount in circulation

Utility

The state of being useful, profitable, or beneficial.

BTC Max Supply: 21M



What is Crypto Currency?

Digital currency in which transactions are verified and records maintained by a decentralized system using cryptography, rather than by a centralized authority.

Transactions are secured and verified using a mechanism called consensus.

Consensus mechanisms in cryptocurrency work when information from a transaction is broadcast across the network.

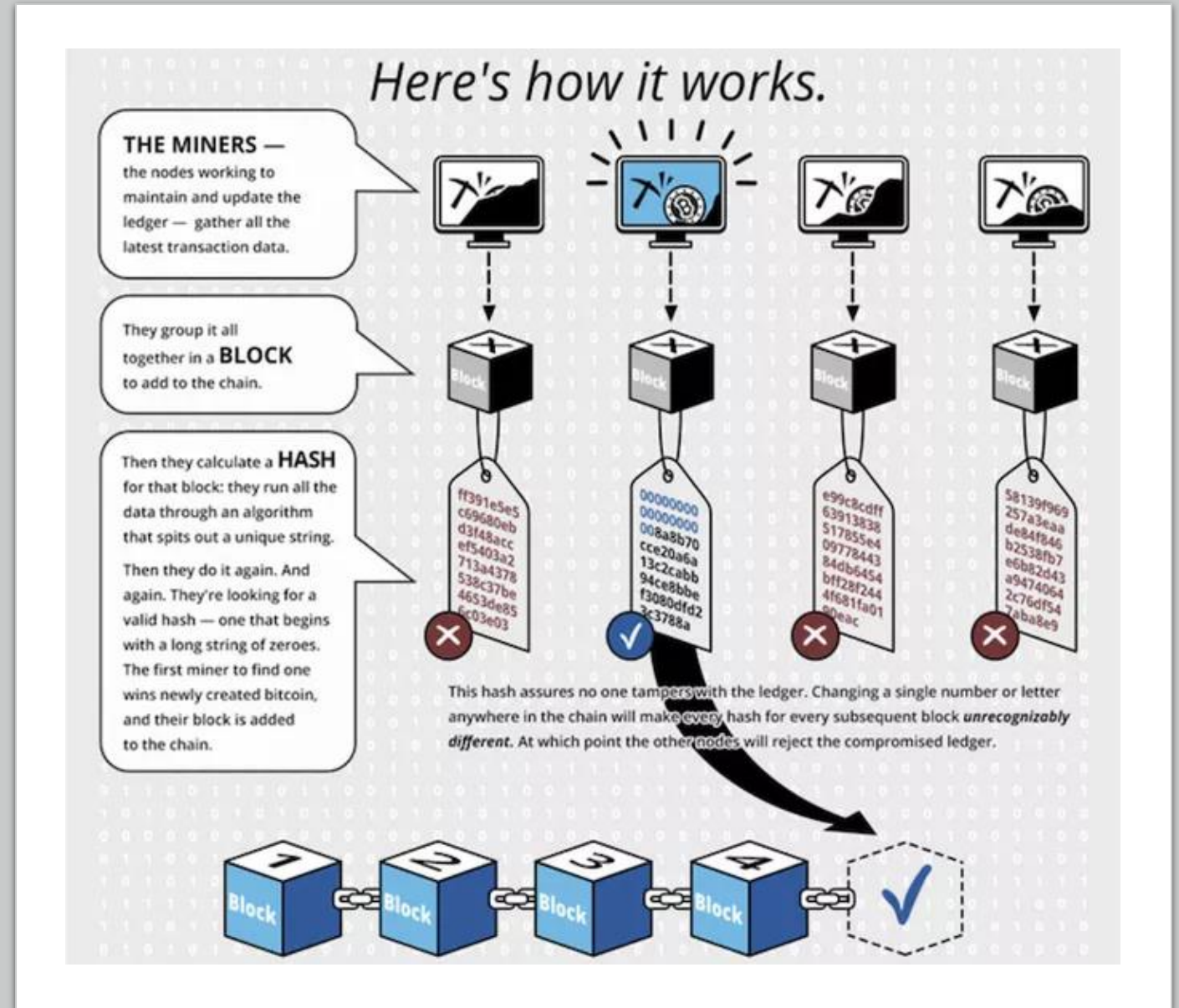
Nodes receive the transaction contained in encrypted code. The details of the transactions along with a fault-tolerant mechanism that forces every node to agree on the transaction information before it can be finalized.

Consensus

- Proof of Work (PoW) is the first blockchain consensus mechanism used by Bitcoin. The requirements for proof of work are defined by the expensive computer calculations that must be made to create a new group of trustless transactions in the blockchain. In Proof Of Work, the idea is that miners in a network must prove that they have made a certain effort. This is where high computing power is required.
- The Proof of Stake Mechanism (PoS) is a protocol-class consensus for blockchains that select validators related to their share of the cryptocurrency. PoS is a consensus between nodes where the stake is the monetary asset and authority where consensus stake is the actual identity of the node present in the system.

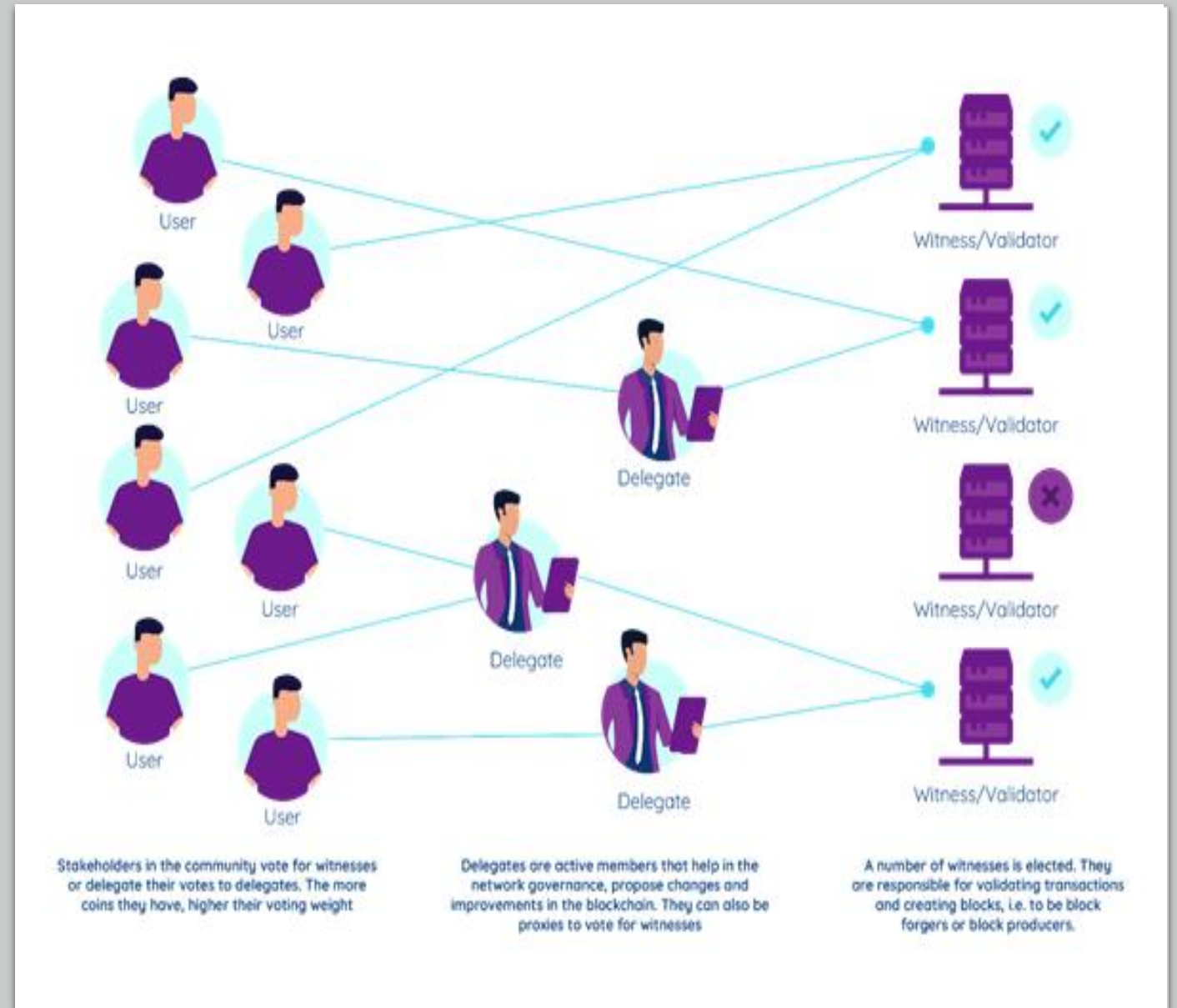
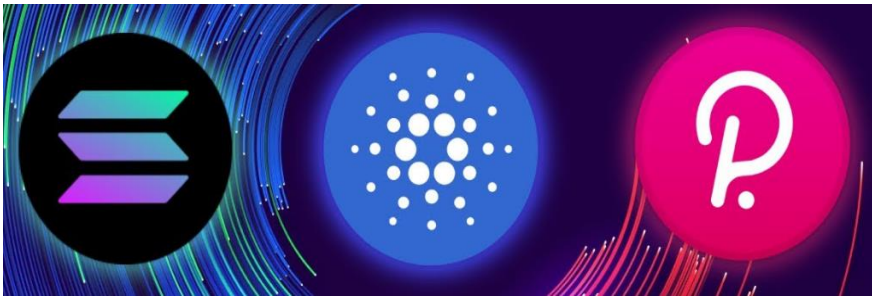
Proof of Work (PoW) Mining

1. Bitcoin
2. Ethereum
3. Monero
4. Dogecoin



Proof of Stake (Pos) Validation

1. Cardano
2. Solana
3. Polkadot
4. Avalanche



Types of Coins

1. Store of Value
 - A. Public Ledger
 - B. Privacy Chain
2. Utility
 - A. Layer 1 / Layer 2
 - B. Protocols
 - C. Governance & Utility Tokens
 - D. Stable Coins
3. Meme Coins



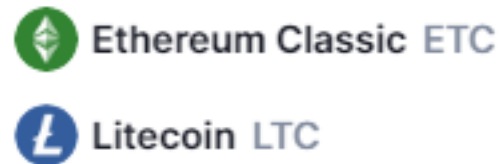
Store Of Value

These coins serve one purpose to maintain value.

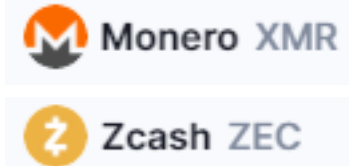
Gen 1



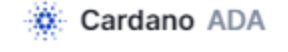
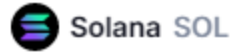
Gen 2



Private Ledger



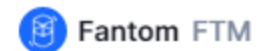
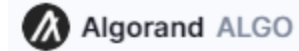
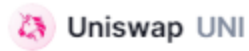
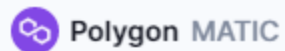
Utility



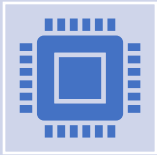
These coins/tokens act as a means of operation to transact on the blockchain. Utility coins/tokens operate with a mechanism known as a smart contract.

Smart contracts are contracts expressed as a piece of code that are designed to carry out a set of instructions.

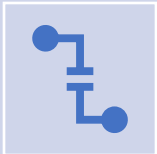
If you want to submit a transaction to the Ethereum Blockchain you must pay the miner fee in ETH. This fee is known as "Gas".



Layer 1 / Layer 2



Layer 1 – Layer 1 refers to the main blockchain architecture. This means that blockchains such as Bitcoin, Ethereum, and Cardano are all Layer 1 blockchains. The scaling of the blockchain directly depends on the code of the initial blockchain and its consensus mechanism.



Layer 2 – these are third-party solutions that are implemented to work in pair with the initial Layer 1 protocols. Their main goal is to improve the scalability of the underlying blockchain. They can also add additional features, such as smart contract capability, or improve upon their functionalities.



Ethereum ETH



Polygon MATIC



XRP XRP



Spark FLR

Protocols

Protocols are projects that run on top of layer one blockchains.

Protocols operate utilizing their token and require the layer one coin to submit a transaction.

- Decentralized exchanges (DEX)
- Launch Pads
- Games
- User interfaces
- Development Tools
- Decentralized Applications (DAPPs)

Governance & Utility Tokens

Governance responsibilities on blockchain projects are governed utilizing the DAO model, or Decentralized Autonomous Organization

DAO is to establish a company or an organization that can work with absolutely no hierarchical management.

If you hold the governance coin you can participate in voting events.

Utility tokens are distributed in junction to the blockchain however they do not hold responsibilities.



Gala GALA



Town Star TOWN



Ethereum ETH



Uniswap UNI

Stable Coins

A stable coin is a digital currency that is pegged to a “stable” reserve asset like the U.S. dollar or gold. Stable coins are designed to reduce volatility relative to unpegged cryptocurrencies like Bitcoin.

1 USDC = 1 USDT = \$1



What Are Meme Coins, and Can They Make You Rich?

Cryptocurrencies were developed to solve real-world problems. The goal is to eventually become widely accepted by merchants, creating a new form of decentralized currency and revolutionizing a variety of industries.

Meme coins serve no real-world purpose and were created as a way to make a quick buck.



Self-Custody vs Custodial Custody

Custody is a financial services term that refers to the ability to hold, move, and protect assets.

You can either do this yourself (self-custody) or you can get someone to do it for you (custodial solution).

- No one or nothing can stop you from moving assets
- No limits on transactions
- No back-up / forgot my password
- No Insurance



"Not your keys, not your crypto"



Decentralized Finance (DeFi)

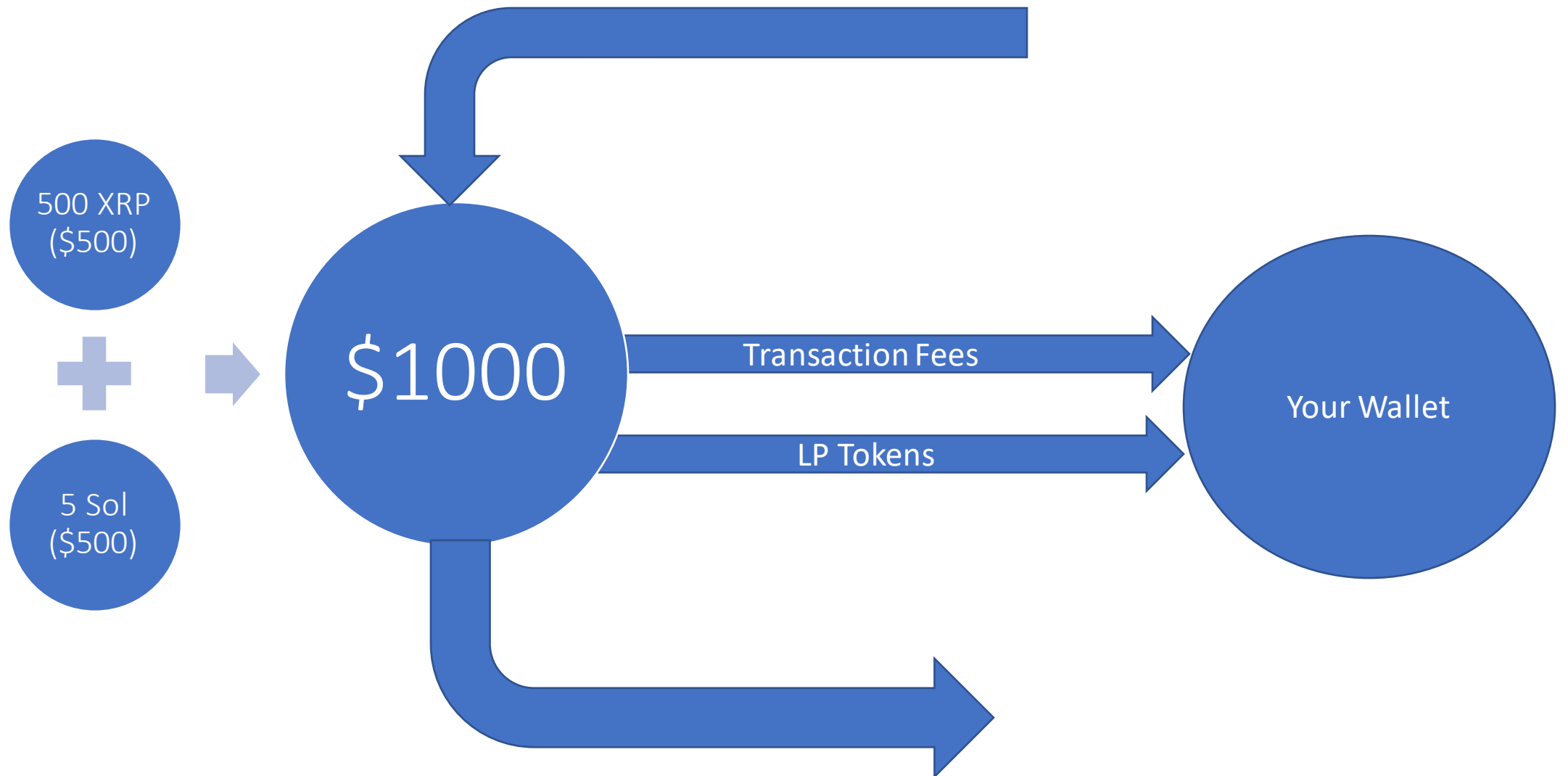
Decentralized finance (DeFi) offers financial instruments without relying on intermediaries such as brokerages, exchanges, or banks by using smart contracts on a blockchain. DeFi platforms allow people to lend or borrow funds from others, speculate on price movements on assets using derivatives, trade cryptocurrencies, insure against risks, and earn interest in savings-like accounts.

Staking

Liquidity Pools












Yield Farming

Liquidity Pools and Impermanent loss



Centralized Finance

coin</>cap
CoinCodeCap.com

	Nexo	Celsius Network	HodlNaut	YouHodler	Crypto.com	BlockFi
Interest Rates (APY)	8% APY on BTC and up to 12% APY on stablecoins	Up to 6.3% APY on BTC & ETH, and up to 11.2% APY on stablecoins	7.5% on BTC 12.73% on Stablecoins	Up to 5.5% APY on BTC & ETH, and up to 12.3% APY on stablecoins	6.5% APY on BTC & up to 12% APY on stablecoins	Up to 4.5% APY on BTC & ETH, and upto 7.5% APY on stablecoins
Assets Supported	18	43	6	22	70	8
Min. Amount	No Minimum	No Minimum	No Minimum	US \$100	US \$100	No Minimum
LTV ratio	25%-60%	25%-50%	70%	90%	50%	50%
Mobile app	 	 		 	 	 
Lock-in Period	×	×	×	×	×	×

Oracle

An oracle is a bridge between the blockchain and the real world. **They act as on-chain APIs you can query to get information into your smart contracts.** This could be anything from price information to weather reports. Oracles can also be bi-directional, used to "send" data out to the real world.



Chart Reading

Investing Vs Trading

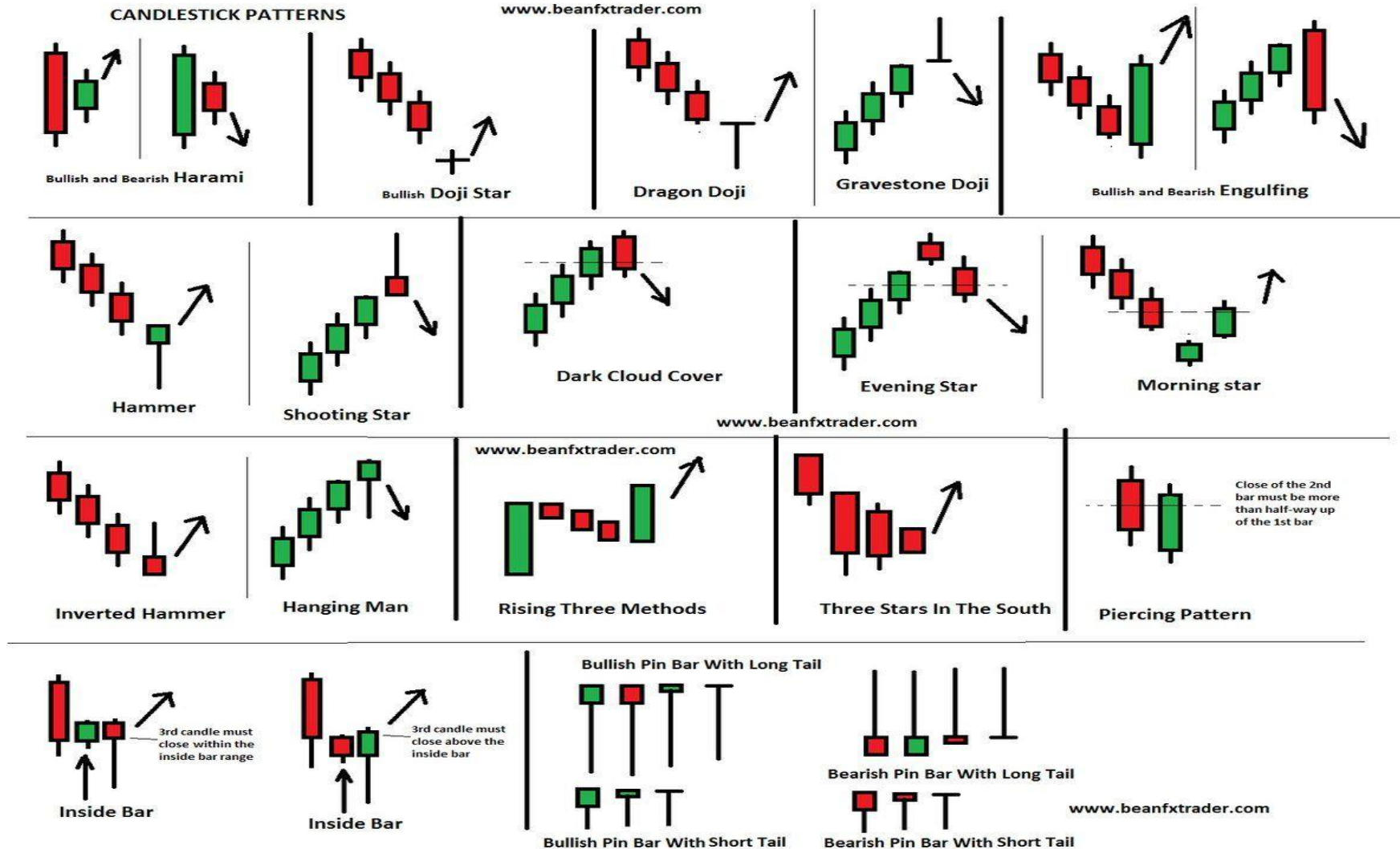
5 Tools for success

- Volume
- Stoch RSI
- 200 Day Moving Average
- Time Frames
- Stop Loss

[TradingView – Track All Markets](#)



May the odds be in your favor!



Fundamental Analysis / Market Research

[CoinMarketCap / CoinGecko](#)

White Paper

Team

Value / Market Cap

Utility

Tokenomics

Community

Nun-Fungible Token's (NFT)

A NFT is a file that has source code assigned to it unlocking privileges, rights, smart contracts, etc...

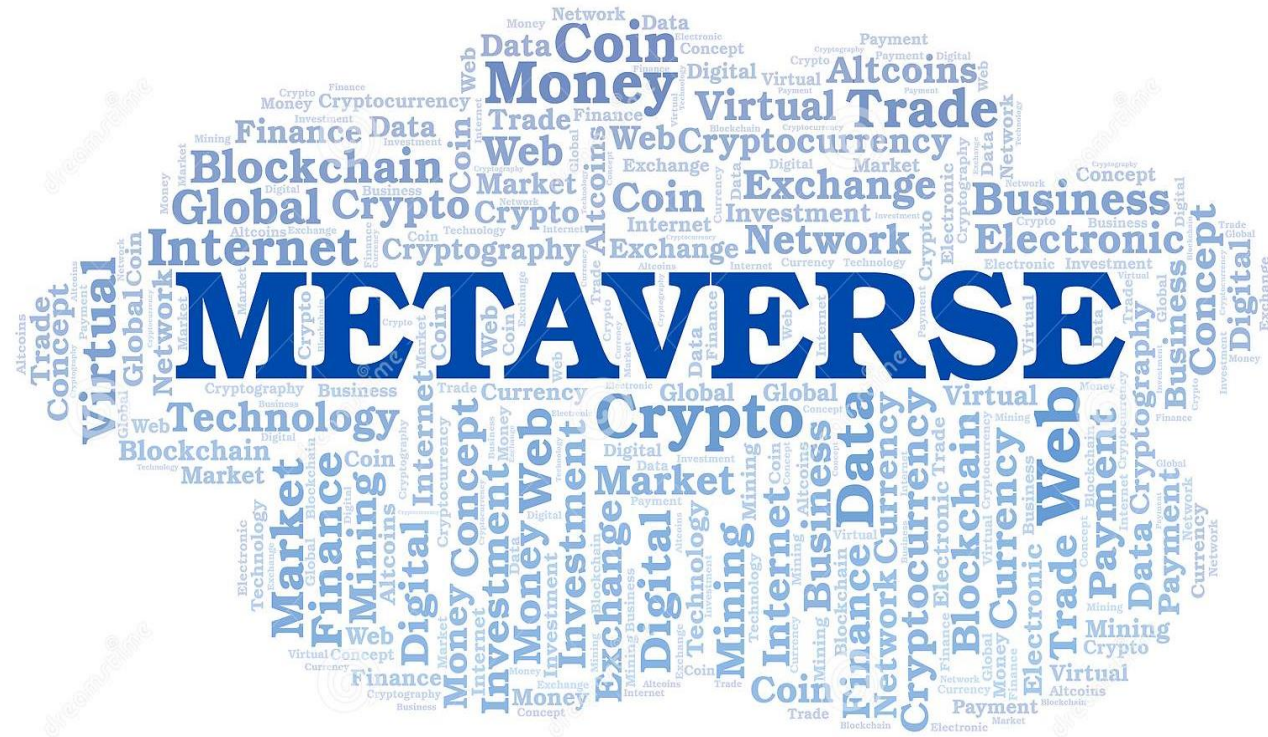
Ex. Bored Apes Yacht Club -> Access to the private group
Play to Earn Games -> Ability to earn rewards

The potential of NFT's is limitless with allowing ownership rights to media, selecting release of content, identification, property ownership, etc...

Markets
OpenSea.io <- Largest Market Place
Rarible.io



Metaverse / Play-To-Earn Gaming



- [Decentraland](#)
- [Sandbox](#)
- [Gala Games](#)
- [BLOKTOPIA](#)
- [Metamall](#)



Taxes

What is a Taxable Event?

- Selling your cryptocurrency for fiat money such as USD
- Exchanging your cryptocurrency for another type of cryptocurrency or digital asset
- Paying for goods or services with cryptocurrency
- Receiving compensation in cryptocurrency
- Earning staking rewards in cryptocurrency ---> taxed when sold not received
- Receiving an airdrop in cryptocurrency ----> taxed when received

What isn't a Taxable Event?

- Purchasing cryptocurrency with fiat
- Transferring cryptocurrency from one of your personal wallets to another personal wallets
- Making donations of crypto to a registered charitable or non-profit organization
- Gifting crypto up to \$15,000 per donee or recipient

[Koinly — Free Crypto Tax Software](#)