

# What is blockchain?

While the technology behind blockchain is very complex, the functionality at its core is quite simple. This infographic explains how blockchain works.

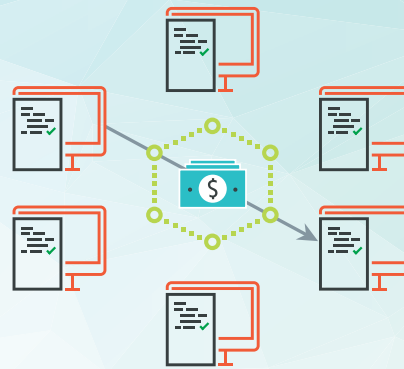
## 1. The basics...

- Need at least three people, but more is better
- All mutually agree to be in a group for some common purpose
- Group members are anonymous to each other
- All group members see every transaction



## 2. A sample transaction – the transfer of funds between two people in the group...

- Lender announces a \$500 transfer and it's seen by all
- Every group member has a full copy of the account of every other group member, a **distributed ledger**



- Each checks lender's balance, and if enough, each enters a transfer in their ledger
- The transaction is then considered complete
- This continues for further transactions

## 3. Locking a ledger page

- When a ledger page is full, its contents are run through a **cryptographic calculation** that generates unique code which is a **"hash"**



- You always get same hash for a given input
- Changing just one character on the page will result in different hash
- Hashing the ledger page "locks" it, making it verifiable

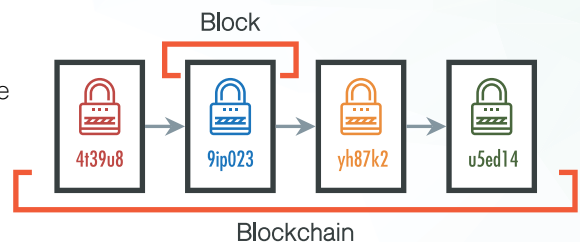
## 4. Mining

- The first to calculate hash announces it to the group
- Others check hash
- If it is verified by the majority in the group, first person gets paid nominal amount of new money
- This is called **mining**



## The secret sauce in blockchain...

- The hash of the prior page is calculated into the hash of the current page
- Each ledger page is a **block**
- The linked blocks are a **blockchain**
- This gives you a locked and verifiable chain of transactions



The blockchain in this infographic handled simple financial transactions. Blockchain systems can include smart contract functionality and could be used for complex commercial transactions involving multiple parties. The appeal of blockchain is its ability to irrevocably verify and record every step in a transaction in a secure environment that is global and platform independent.



For a video explanation visit the [LawPRO YouTube page](#).