A block is a location in a blockchain where data is encrypted and stored.

Long numbers are used to identify blocks, which contain encrypted transaction data from previous blocks as well as new transaction data.

Before new blocks can be generated, the information contained in them must be verified by a network.

Common components in blocks are:

Magic number:

A number carrying specific values that identify a block as refer to a specific cryptocurrency's network.

Blocksize:

Sets the block's size limit, allowing only a certain amount of data to be written in it.

Block header:

Contains information about the block.

Transaction counter:

The number of transactions in the block is represented by this number.

Transactions:

A list of all of the transactions within a block.

A transaction includes:

- Version : The cryptocurrency version being used.
- Previous block hash : Contains a hash of the previous block's header.
- Hash Merkle root : Hash of transactions in the current block's Merkle tree.
- Time : A timestamp for the block's insertion in the blockchain.
- Bits : The target hash's difficulty rating, indicating how difficult it is to solve the nonce.
- Nonce : A miner must solve an encrypted number (Nonce) to verify and close a block.