

Mining

In Crypto domain





In general, mining is to put in a physical effort for the extraction of something valuable.

In Crypto domain, miners put in certain kind of **efforts** and they get back cryptocurrency which is valuable, as a **reward**.

What exactly is crypto-mining..?

Crypto miners **compete each other** to solve a **complicated mathematical problem** using high-performance computers.

The first miner to crack the problem will be authorized to verify and add the transactions to the blockchain ledger.

For every **new block added**, there's a **reward** in terms of **cryptocurrency**.



Mining makes ways to
Block addition and
Verification - achieving
consensus and earning
a **reward**.

Mining was possible from a personal machine in the beginning.
But mining farms has taken it over now.



Bitcoin network consumes **91 TeraWatt-hours** of electricity annually, which is more than Finland (a whole country).

There are several **different algorithms** and **consensus mechanisms** available.

Proof of Work (PoW), **Proof of Stake** (PoS), **Delegated Proof of Stake** (DPoS), **Practical Byzantine Fault Tolerance** (PBFT), **Proof of Elapsed Time** (PoET), **Directed Acyclic Graph** (DAG) are just the popular among them.

The consensus itself is an **enormous field of research** in the Blockchain domain.