

# Game Ticks

## How the game runs

The Minecraft game engine progresses through time in steps called "ticks". In each second there are 20 "game ticks". There will never be more than 20 game ticks in a second, however, if there are less than 20 this means the game is lagging. Each tick includes processing most things in your Minecraft world. All ticks are calculated on the server that is running the world. As the server is calculating the ticks even if your FPS drops, your Minecraft world can still run at full speed. On the other hand, even if you have high FPS your TPS (ticks per second) can be below 20 making things in the world sluggish (such as mobs moving).

Even in single-player sessions, there is a server running on the device that is calculating the ticks.

If you are experiencing low TPS (ticks per second) in your Minecraft world constantly and want to upgrade your computer, upgrading your CPU will make the game run better as opposed to the GPU.

## Things in the game that are controlled by game ticks:

- WIP

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Revision #8

Created 28 August 2023 15:13:59 by kai.ryu

Updated 13 October 2023 11:50:15 by kai.ryu