

# Minecraft: Java Edition

## User Guide

# Minecraft: Java Edition

## Account Creation, Licencing, and Installation

As of 2021, a Microsoft Account is required to play Minecraft. A Microsoft account can be created for free through [microsoft.com](https://microsoft.com) if you do not already have one.

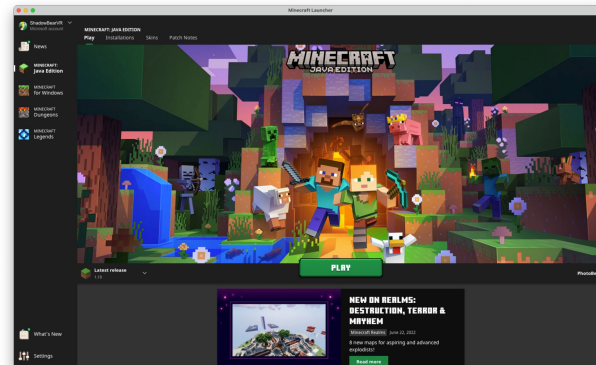
While Microsoft provides a [trial version](#) of the game (with a 90-minute time limit), the rest of this User Guide assumes you are using a fully licenced version of Minecraft. A licence for Minecraft can be bought online from [minecraft.net](https://minecraft.net) or through retailers such as [Best Buy](#) or [Target](#).

Caution: Microsoft recently changed how Minecraft is sold. Both Minecraft: Java Edition and Minecraft: Bedrock Edition are now sold together as one on [minecraft.net](https://minecraft.net). However, not all retailers have updated their listings to reflect this. Wherever you buy Minecraft from, make sure Minecraft: Java Edition is included!

Minecraft: Java Edition is available for computers running Windows 7 or higher, macOS 10.9 or higher, or any version of Linux released during or after 2014. See full system requirements [here](#).

### *Getting Started With Minecraft*

- Go to [minecraft.net](https://minecraft.net) and click “Get Minecraft”.
- After reviewing system requirements, click “Computer”.
- You will then login to (or create) your Microsoft Account and purchase a licence for Minecraft.
- Follow the instructions to download the correct Minecraft Launcher for your computer and install Minecraft.
- Once installed, sign in with the same Microsoft account you used earlier to licence Minecraft.



# Minecraft: Java Edition

## Your First World

You can play Minecraft in either singleplayer or multiplayer. Singleplayer takes place on “worlds” created on your computer, while multiplayer connects you to Minecraft servers around the world.

Q&A: What is Minecraft Realms? A Minecraft Realm is a Microsoft-owned Minecraft server that can be rented from Microsoft for a monthly fee.

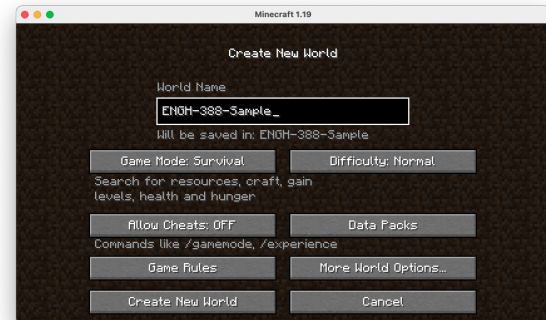
Each Singleplayer world in Minecraft is randomly generated. A world is identified through a “Seed” value (shown via the “More World Options” button when creating a world).

You can create as many worlds as you want on your computer, as each is independent of each other. You can create multiple worlds to see all Minecraft has to offer.

When creating a new Singleplayer world, you will see many options including Game Mode, Difficulty, and Allow Cheats. For now, leave all the options at their defaults, as this will create a “default” Minecraft world for you to explore.

### *Creating Your First World*

- After launching Minecraft, click “Singleplayer”. If you do not see the screen shown below, click “Create New World” in the lower right-hand corner.
- Enter a name for your world, such as “ENGH-388-Sample”.
- (Optional) Click “More World Options” and enter the seed “ENGH-388-Sample”. This is the Seed this User Guide uses.
- Click “Create New World” in the lower left-hand corner.
- Your new world will be created and you will load into it soon after. Depending on your computer, this may take a few minutes.



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## Navigating The World

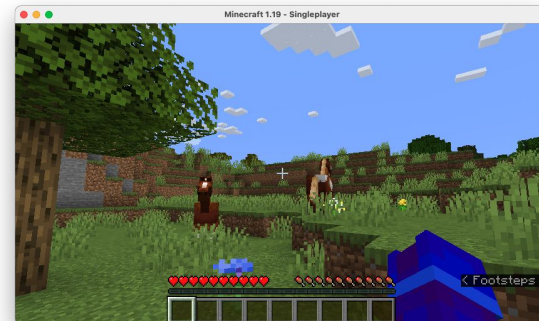
It is time to explore your new world! Minecraft is played through a Mouse and Keyboard. You can view basic controls while in-game by pressing the **Escape Key (Esc)** and clicking on “Options -> Controls -> Key Binds”. Important controls are described below.

Action	Key
Move Forward	W
Move Backwards	S
Move Left	A
Move Right	D
Run	Left Control
Sneak	Left Shift
Jump	Space
Open Inventory	E
Open Pause Menu	Esc

### Your First Steps - Learn The Controls

1. Move your **Mouse** left and right to look side to side.
2. Move your **Mouse** up and down to look up and down.
3. While looking forward, press and hold **W** to move forward.
4. After moving forward for a few seconds, release **W** and press and hold **S** to move backwards.
5. Repeat Steps 3 and 4 with **A** and **D** to move left and right.
6. Finally, press the **Spacebar** to jump.

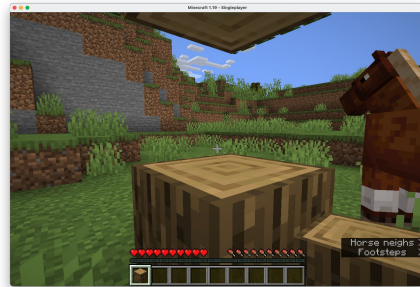
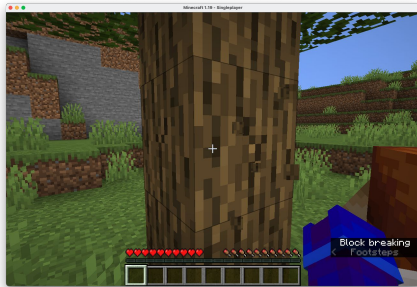
Helpful Tip: Your movement is relative to the direction you are facing. **W** will always move you towards where you are looking.



# Minecraft: Java Edition

## Mining and Building

Mining is a core aspect of Minecraft, and one of the first tasks you will complete in your new world. Nearly every block you encounter is mineable, although different blocks will take different amounts of time to mine and some require special tools. Look at a block and press down on the **Left Mouse Button (LMB)** to begin mining. The block will disappear when fully mined.



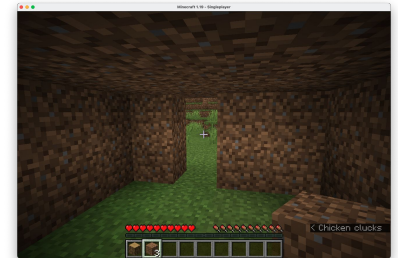
Some blocks, such as dirt, sand, and wood logs, drop a block of themselves as an item when mined. Other blocks, such as stone or leaves, don't drop anything unless they are mined with a specific tool.

### *Building Your First House*

- Gather some dirt blocks by mining them. One stack of dirt will be enough to start with.

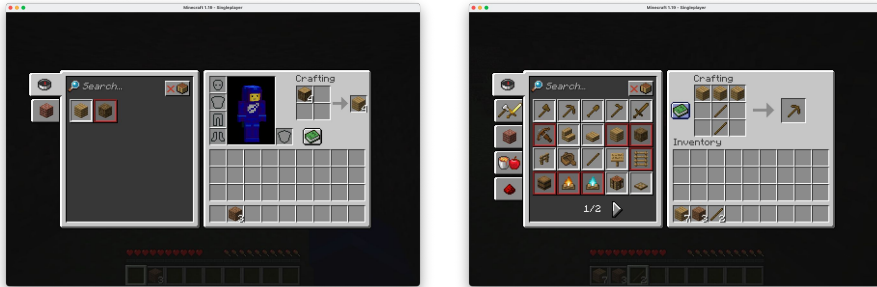
Helpful Tip: A “stack” is usually 64 of a single block, although some items aren't stackable or can only stack up to 16.

- Place the first block of your house by clicking on the **Right Mouse Button (RMB)**. You can press and hold the **RMB** to place multiple blocks at once.
- Complete your first house by building up walls and a roof using the dirt you mined earlier.



## Crafting and Inventory Management

Some blocks, such as stone, only drop an item when mined with a Pickaxe or other specific tool. These tools can be created through the use of a [Crafting Table](#). In Minecraft, crafting allows you to take basic resources, such as wood logs, and convert them into wood planks, sticks, and tools like axes, shovels, and pickaxes. You can also combine different resources with each other to create more complex items.



Any blocks that drop on the ground can be collected by walking over them. When collected, these blocks enter your [Inventory](#). Your inventory can hold up to 36 stacks of items. Your inventory is also where you can equip armor and a shield in the future, and perform basic crafting.

### *Craft a Wooden Pickaxe*

- Gather 4 wood logs (of any type) by mining trees.
- From the safety of your dirt house, open your inventory by pressing **E**.
- Click on the green “Book” icon to view your available “recipes”.
- Craft 16 planks by placing your 4 logs in the crafting area of your inventory.
- After creating the planks, follow the recipes to create 1 Crafting Table and 2 sticks. Exit your Inventory by Pressing **E** again.
- With the Crafting Table selected, place the crafting table in your House using the **RMB**. Enter the Crafting Table by clicking on it using the **RMB**.
- The Crafting Table will expand your crafting area to a 3x3 grid (instead of the standard 2x2 grid). This allows you to craft more complex items, such as a Pickaxe.
- Follow the recipe to create a wooden pickaxe.

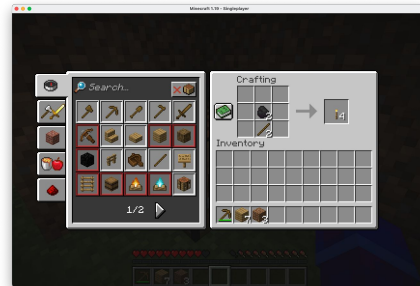
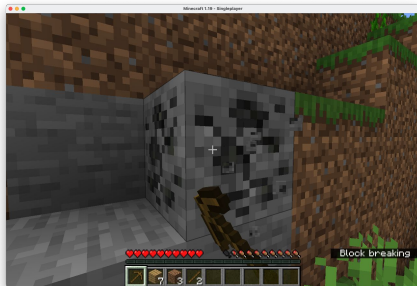
Helpful Tip: Minecraft is all about progression. With a wooden pickaxe you can now mine stone. Other resources however, such as Diamond, require a better pickaxe. Learn more about pickaxes [here](#).

# Minecraft: Java Edition

## Lighting Up Your World

Every minecraft world has a [daylight cycle](#), with one in game day passing every 20 minutes. At night, hostile creatures known as “mobs” begin to appear as the light level is low enough.

To prevent mobs from appearing, you can artificially increase the light level by crafting [torches](#), [campfires](#), [lanterns](#), or other light-producing blocks. Torches are the most basic light source, and require the fewest materials to craft.



### *Lighting Up Your Base*

- Explore the world until you find coal (shown to the left).
- Collect 2 pieces of coal by mining it with your wooden pickaxe.
- Return to your house, and create 8 torches by following the [Torch](#) recipe. This can be done from the crafting table you made or from your inventory.
- Place two torches inside of your house and six torches around the outside of your house. This should prevent mobs from spawning around your base at night.



Helpful Tip: Press F3 (or FN+F3 on some macOS computers) while in game to view Debug Information, including your XYZ coordinates and the light level of the block you are looking at.

## Glossary

### *Bedrock Edition*

- A newer version of Minecraft, compatible with Windows, Xbox, Playstation, and Nintendo Switch devices.

### *Education Edition*

- An education-oriented version of Minecraft, compatible with Windows and macOS computers, as well as Chromebook and iPad devices. It was designed to be used in a classroom environment for teaching and not as a standalone game.

### *Java Edition*

- The original version of Minecraft, compatible with Windows and macOS computers. This is the version of Minecraft covered in this User Guide.

### *Microsoft Account*

- The account required to use Minecraft since 2021. Your Microsoft account will be used to login to Minecraft, licence your copy of Minecraft, and manage your Minecraft profile.

### *Mojang Account (Discontinued)*

- Prior to 2021, a Mojang Account was used to login to Minecraft, licence your copy of Minecraft, and manage your Minecraft profile. This was discontinued due to Mojang Studios (makers of Minecraft) being acquired by Microsoft.

### *Biome*

- A section of your Minecraft world, with unique structures, animals, and other materials. Biomes range from hot (deserts and jungles) to cold (tundra and mountains). A list of all general types of Biomes can be found [here](#).

### *Enchanting*

- Tools (such as your Pickaxe or Shovel) and Armor (such as your Helmet or Leggings) can be enchanted through the use of an [Enchanting Table](#) to mine blocks faster, last longer, or have other improvements. See [Minecraft Enchantments](#) for more.

### *Game Mode*

- Your game mode decides what resources you start with and if your primary goal is to survive or to build. There are two primary game modes in Minecraft: [Survival](#) and [Creative](#). In Survival, you start out with no resources and have finite health. In Creative, you have unlimited resources, infinite health, and the ability to fly. This User Guide focuses on Survival mode.

### *Mob*

- One of any kind of “living” creatures that populates your Minecraft world. Mobs can be hostile (such as [Zombies](#) or [Creepers](#)), neutral (such as [Wolves](#) or [Bees](#)), or passive (such as [Cows](#), [Villagers](#), and [Rabbits](#)).



## Additional Resources

### *Official Resources*

- Home - [minecraft.net](https://minecraft.net)
- Support - [help.minecraft.net](https://help.minecraft.net)
- YouTube - [youtube.com/c/minecraft](https://youtube.com/c/minecraft)

### *Advanced Topics*

- Redstone - [Redstone on the Minecraft Wiki](#)
- The Nether - [History of the Nether](#)
- The End - [The End on the Minecraft Wiki](#)

### *Community Resources*

- Wiki - [minecraft.fandom.com](https://minecraft.fandom.com)
- Reddit - [reddit.com/r/minecraft](https://reddit.com/r/minecraft)

### *Inspiration*

- Structures to Build - [24 Building Ideas](#)
- Farms to Build - [Farming Overview](#)
- Character Costumes - [minecraftskins.com](https://minecraftskins.com)

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This User Guide was developed by Collin MacDonald for a Professional and Technical Writing course (ENGH388) at George Mason University.

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All images used in this guide were captured in-game for use in this guide unless otherwise noted.