# HOUR OF AI: THE FIRST NIGHT



## How to lead an Hour of AI

MOJANG STUDIOS


MINECRAFT
EDUCATION
THE FIRST NIGHT

# HOW TO PREP FOR CS EDUCATION WEEK

- **Install** Minecraft Education visiting aka.ms/download
- **Take** the Facilitate the Hour of AI course and earn your badge!
- **Review** the Educator Guide and slides in this deck
- **Play** through Hour of AI : The First Night!
- **Download** a copy of the Solutions Guide
- Additional questions? Check out the **FAQ**.

# HOW TO RUN YOUR 1-HOUR SESSION




## 1. Introduction

- **Introduce Yourself** (2 min)
- **Introduce Theme of the Lesson** (1 min) *Refer to Educator Guide.*

## 2. Preview

- **Watch Video Trailer** (1 min) *Share screen and play trailer.*

## 3. Key Concepts

- **Introduce Lesson Activities** (5 min) *Use EDU Presentation slides.*

## 4. Activity Walkthrough

- **Demo First Activity Together** (10-15 min)

*Share screen, open world, and collect wood. Students follow along.*

## 5. Independent Work

- **Students Complete remaining coding activities** (20 min)

*Provide Coding Solutions if needed.*

## 6. Conclusion & Q&A

- **Lesson Conclusion** (5 min)
- Students can also participate in the AI build challenge as a reflection!

MINECRAFT EDUCATION




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# LET'S DISCUSS

What do you think a robot (or AI) can learn to do?

1

2

Have you ever used AI or a smart device?

What is one thing you would like to train an AI to complete for you?

3

# GETTING STARTED

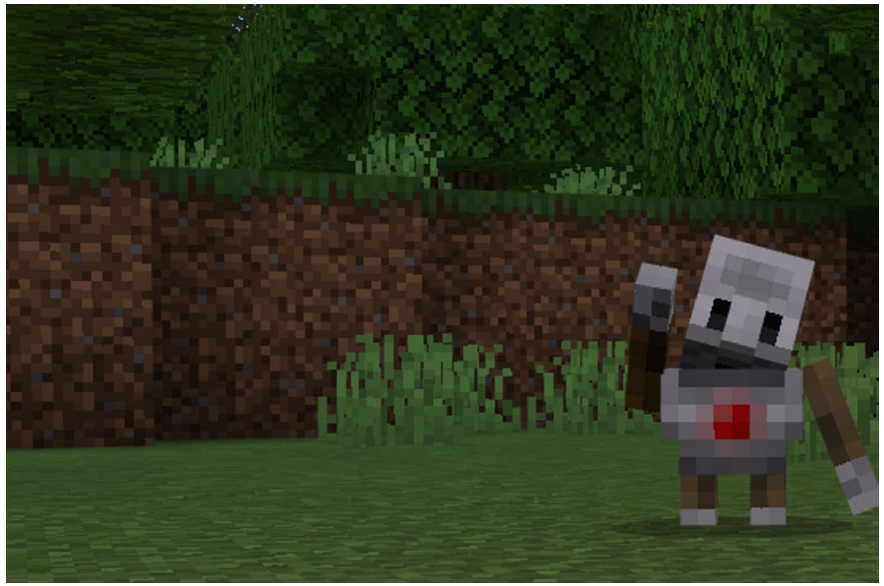
Can you survive the night in Minecraft?!



# PREPARING FOR THE NIGHT

- In Minecraft, there are some specific things that you must do in order to survive…
- You won’t be alone in the adventure… you will have the Agent to help you!



# WHAT WILL WE DO TODAY?

Today, we will:

- Learn about different types of AI
- Think like a computer to understand how AI works
- Practice teaching an AI and testing its answers
- Practice using skills from one project to help with other tasks and become a better teammate

# LET'S PLAY!

Log into Minecraft Education

# GUIDED EXPERIENCE

Hour of AI: The First Night



# BEGINNING GAME PLAY

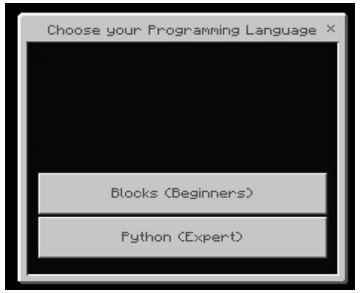
You will spawn into the world.

You will need to click to begin the map.



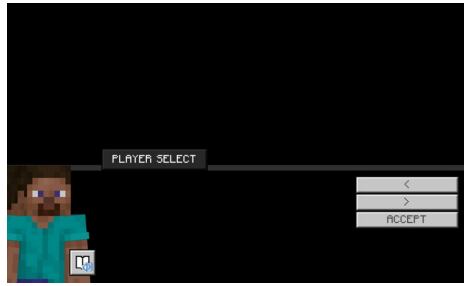

Then, you will be asked to select your coding language:

Blocks or Python.




Next, you will select a skin.

In Minecraft, a skin is an image that determines what your character looks like in the game.




Watch the opening cinematic scene to find out about what your AI adventure is going to be about today!



# THE AGENT CAN HELP!

- Your goal is to survive the first night in Minecraft…
- There are several steps to build a complete shelter and bed.
- Your Agent will assist you in this task, but you will need to train the Agent in the process!
- The Agent is an AI player – it has the ability to copy human-like actions such as learning new things and solving problems.



# USE YOUR BOOK

In your **hotbar**, you have received a **book**:

***"Player's Guide to the First Night in Minecraft"***

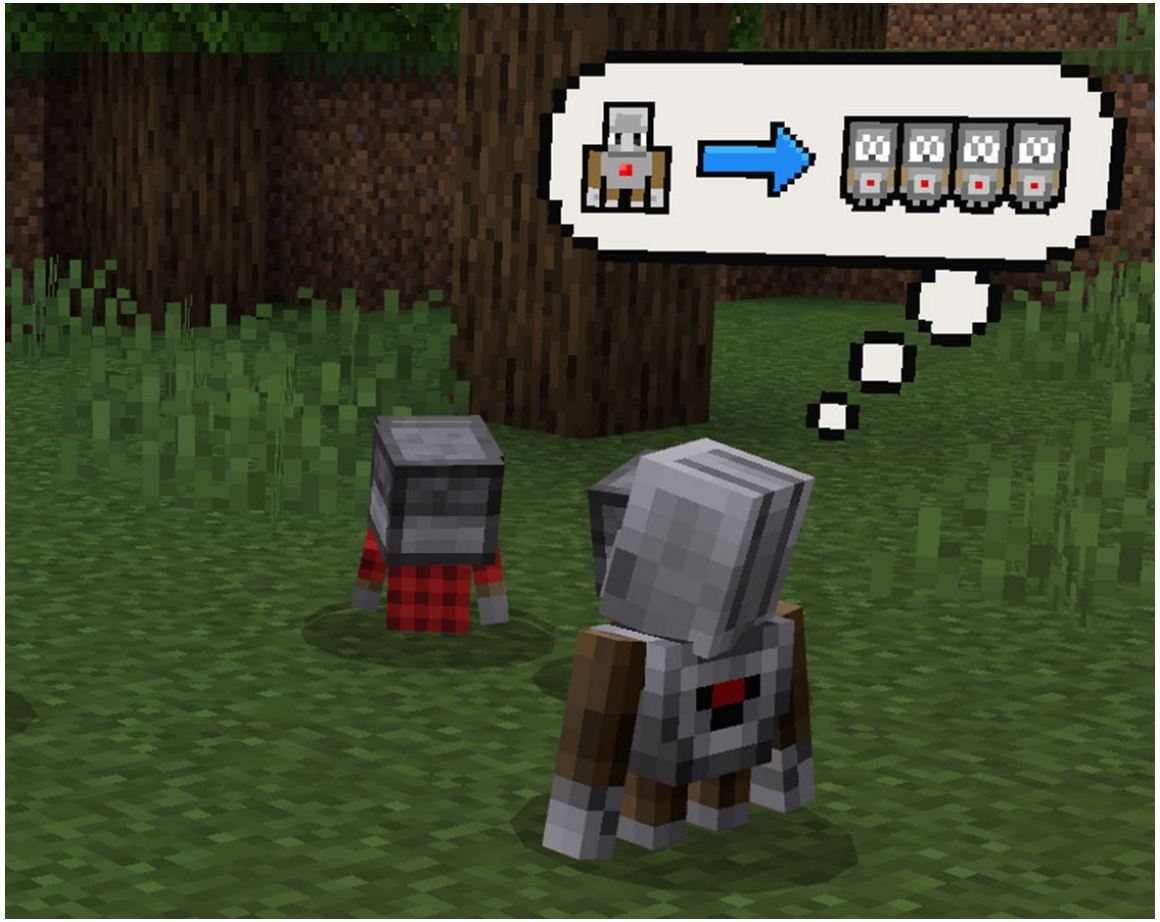
This will provide you will useful information as you progress!





# TASK: COLLECT WOOD

- Welcome to your Minecraft world!
- Meet the Agent…
- Now, you will need to train the Agent to collect wood.



# ACTION ITEMS

We need to complete the following tasks to **collect wood**:

- ❑ **Punch a tree**
- ❑ Collect the wood that falls from the tree
- ❑ **Train the Agent** to classify oak log as wood (**through coding**)
- ❑ Deploy the mini-Agents to collect a lot of oak wood for the player
- ❑ **Train the Agent** to classify birch log as wood (**through coding**)
- ❑ Deploy the mini-Agents to collect a lot of birch wood for the player
- ❑ **Train the Agent** to classify acacia log as wood (**through coding**)

# ACTIVITIES OVERVIEW

The First Night

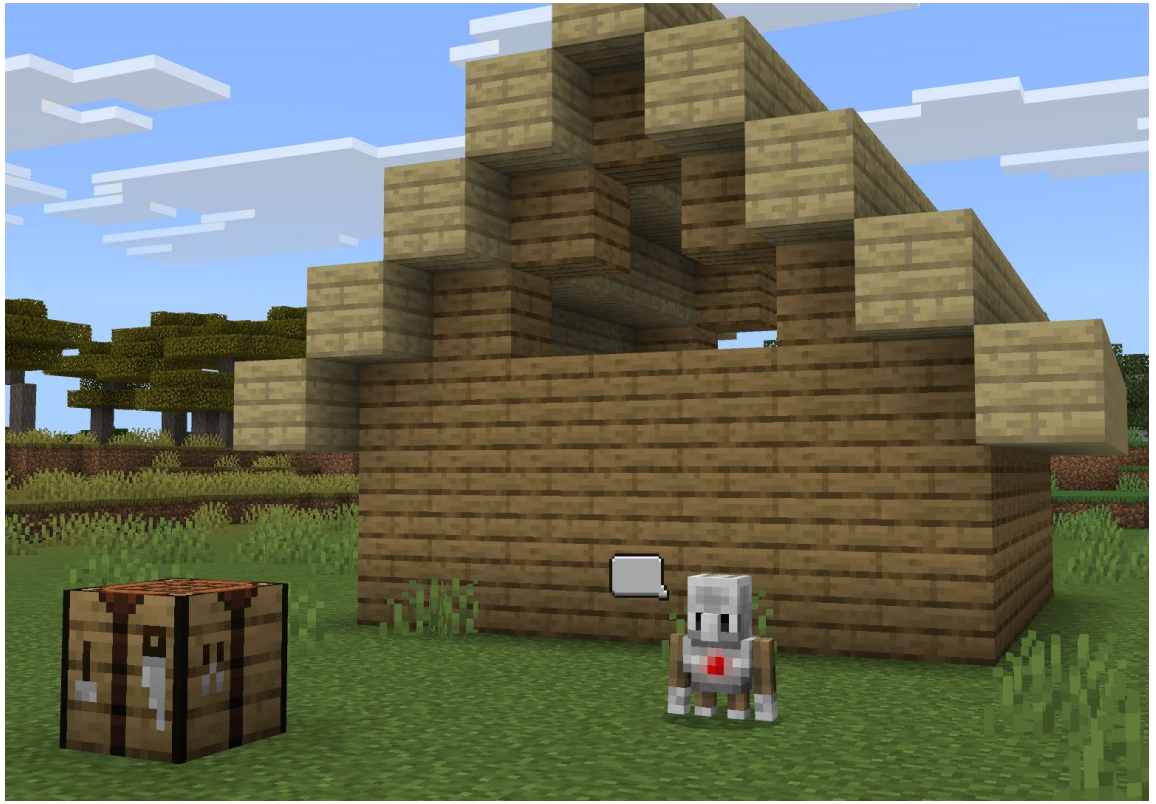


# SPECIFIC TASKS TO COMPLETE

To survive the night, you must:

1. Collect **wood**.
2. Make **tools**.
3. Build a **shelter**.
4. Craft a **door**.
5. Add **light** to the room.
6. Make a **bed**.

**Sounds easy enough, right?**



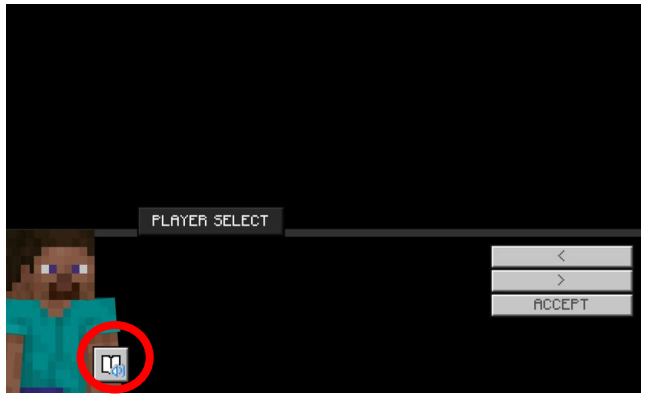
# TIPS & TRICKS

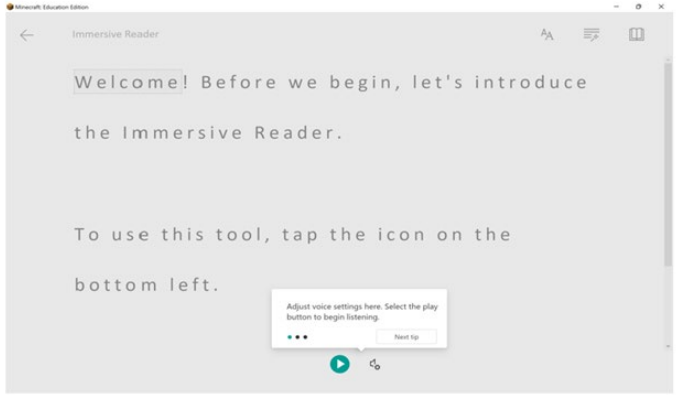
The First Night



# TIPS & TRICKS

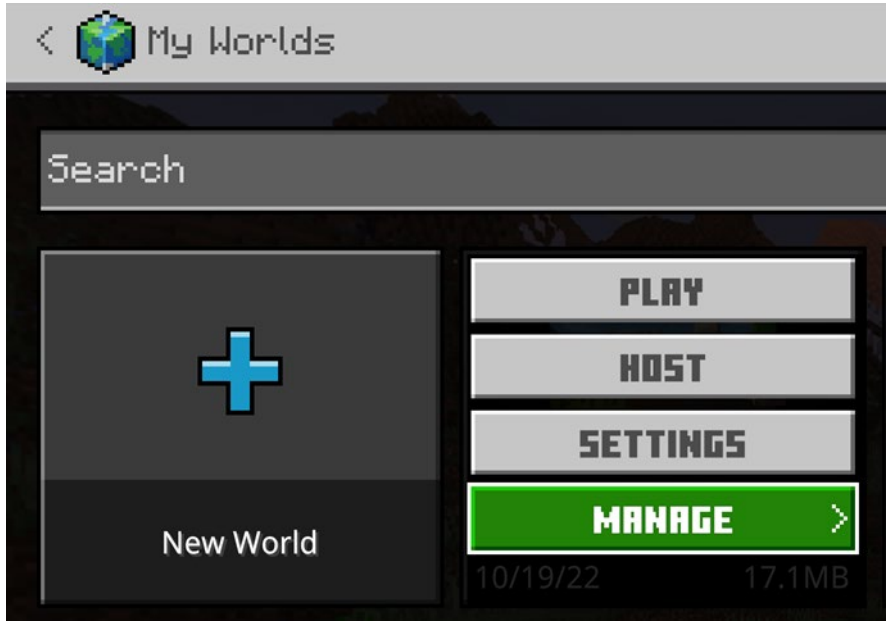
- If you have never played Minecraft before, you should **select Blocks** as the programming language.
- Python is set at expert level. Only players experienced in Python should select this as their coding language.
- A starter code will always be provided in the coding canvas. Students will need to add to the existing code.
- **Use the lightbulb hint** in the coding window to see the solution.
- Encourage students to read through the code and try to decipher what the code is going to do... Usually, there is just a small change that needs to be made!
- Students can use **Immersive Reader** to have the text read aloud or translate the dialog boxes within the game.

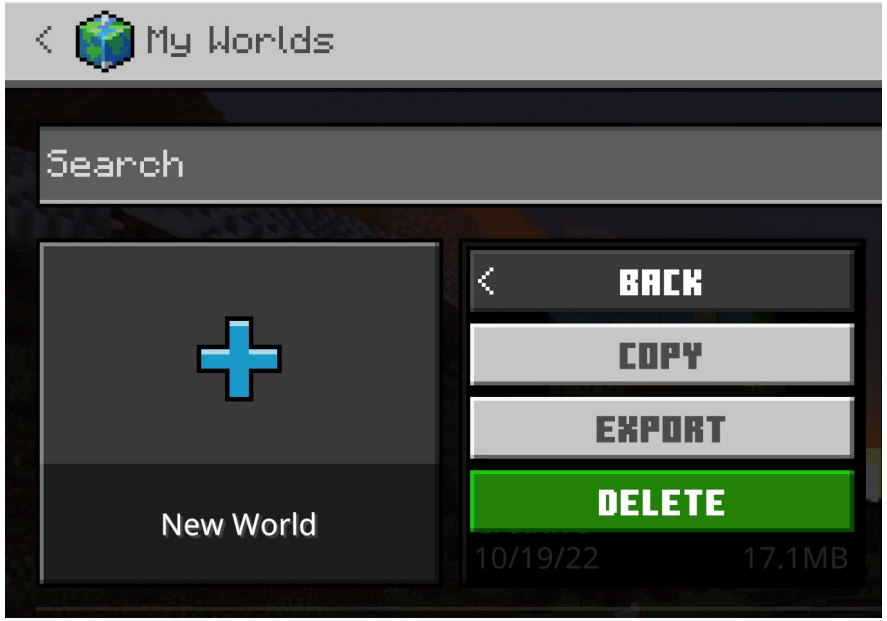


# TIPS & TRICKS

If a student gets stuck or wants to change their programming language after they have already started, they will need exit the game and then delete their game from their “My Worlds” section. Select “Manage” and then select “Delete”.



# RESET THE INVENTORY - HELPFUL HINT

Sometimes, students may end up crafting unnecessary items or even craft too much of a certain item!

- When the crafting "stage" starts, it will start a countdown of 10 seconds.
- After 10 seconds, students should see a "red arrow" above the Agent, indicating the inventory can be reset.
- On interacting with the Agent, they will ask if you are sure about wanting to reset your inventory.
- If you say yes, your inventory will reset to the start of that crafting stage



# GOOD LUCK AND HAVE FUN!

# REFLECTION QUESTIONS

- How do you define artificial intelligence?
- Tell us about your favorite part of the game.
- How can you use AI to complete tasks for/with you?
- How did you train the Agent to help you survive the night?
- Why is human verification important when using AI?



# CERTIFICATE

## CERTIFICATE OF COMPLETION

https://aka.ms/HOAI25certificate

