

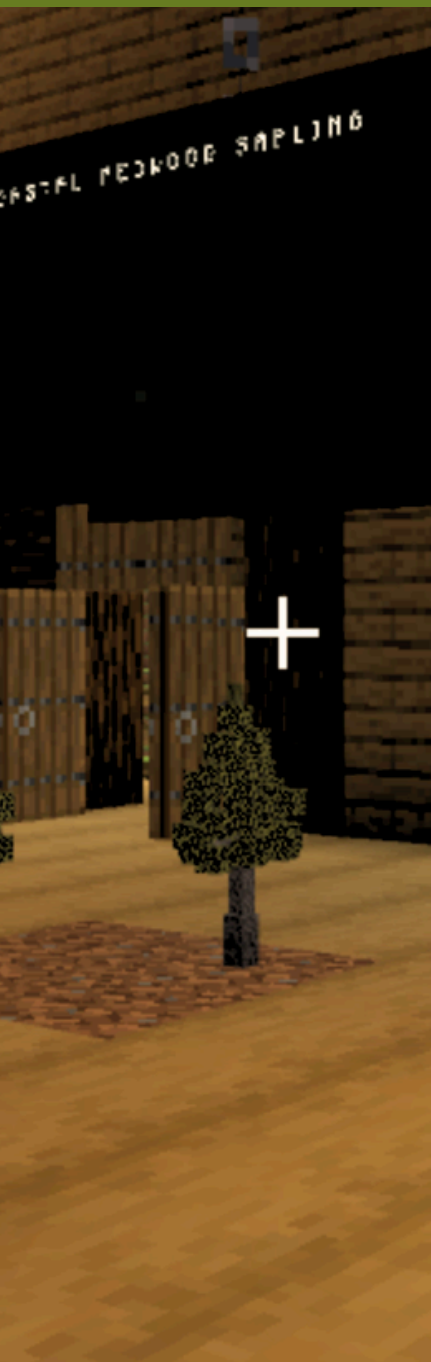
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# Minecraft Timber!! World

Unit Plan (Levels 3–6) This is a teacher resource

“Whatungarongaro te tangata, toitū te whenua”  
“People may disappear, but the land remains.”





# Why use Timber?

Timber is a super useful, renewable resource!

In Totara World, students explore forests, harvest trees, and decide how logs are used—for building, paper, furniture, and other products.

Products can include clothing, insulation, biodegradable bags, and even asphalt additives.

Students measure, plan, and make decisions like a real forestry team.

Using timber wisely helps the environment, supports communities, and keeps the Minecraft world strong and sustainable!

<https://www.canopy.govt.nz>

# Making the most of Minecraft

Minecraft is an exciting shared learning space, so set clear expectations around respectful digital behaviour, including valuing others' builds, communicating appropriately, and supporting learning. If a student may struggle in a shared world, placing them in their own world can help everyone have a positive experience.

If students find reading lots of text challenging, they can use Minecraft Education's built-in Immersive Reader, which reads text aloud, simplifies the font, and shows one line at a time. Look for the icon below when viewing text in the game.



The Book and Quill is a great tool.

The camera can be used to capture images of their work.



# Context for Learning

Students take on the role of forestry technologists in Totara World, a minecraft simulation of a working forest. They explore how trees are harvested, logs are graded and different products area created.

Students will apply mathematical concepts.

Engage in technological practices.

Consider sustainability and environmental impact and use problem solving and analytical skills.





# Looking Ahead

This unit helps develop skills and habits of mind that will support students far into the future:

1. Systems Thinking: Understanding how land, trees, and human decisions interact.
2. Problem-Solving: Analyzing trade-offs, predicting outcomes, and iterating plans.
3. Digital Literacy & Creativity: Using Minecraft to model and experiment.
4. Environmental Stewardship: Ethical responsibility for land and resources.
5. Cultural Awareness: Respect for Māori perspectives and the impact of human decisions.
6. Future-Ready Skills: Collaboration, reflection, resilience, experimentation, and metacognition.

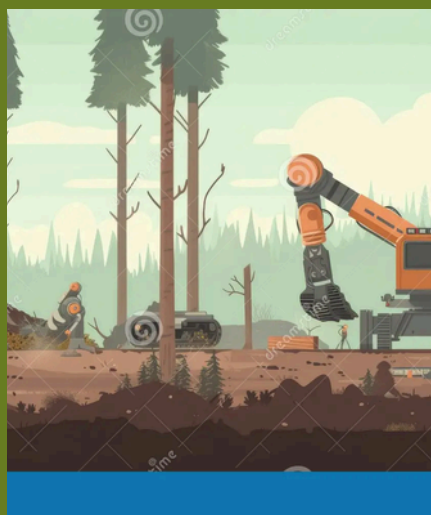
# Big Ideas and Enduring Understandings

· Timber is a renewable and versatile resource. Almost every part of the tree can be used.

Technological decisions, harvesting methods, log preparation and allocation shape outcomes.

Maths, measurement and allocation of resources are essential in forestry.

Timber houses have better air quality.



Sustainable forestry benefits people and the environment.

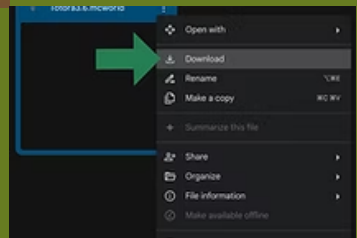
Technological, environmental, economic and practical constraints must be considered when planning harvesting and log use.

# HOW TO USE THESE RESOURCES

- If you don't have or have an old version of Minecraft, please download the latest version:
- Follow the instructions below to download the world. Please note that downloading Minecraft World can be different depending on your operating system and device.
- Take a look at the troubleshoot page if you get stuck. <https://www.sowtheseed.org.nz/troubleshooting>

## Download Mātiki Minecraft World

- Click on the Minecraft World image to download the world.



**FIND THE FILE IN YOUR FILE EXPLORER OR FINDER DOWNLOADS FOLDER AND DOUBLE CLICK TO OPEN IN MINECRAFT.**



# Timber World Talk About It

How would cutting all the trees at once change a forest?

How about just cutting some?

Why do foresters need to grade and measure logs carefully?

How does maths help foresters?

What can we make from different parts of a tree?

How do forestry choices affect people and nature?



What problems might happen if foresters rush or make bad decisions?

How can foresters balance safety, cost and caring for the environment?

# TIMBER!!! World Challenge



Name: \_\_\_\_\_

**Learning Intention:** Students will understand how harvesting choices affect the forest, the uses of trees, and sustainability.

## Tasks:

- ✓ Explore your forest, notice tree sizes and terrain.
- ✓ Choose a harvesting method for your area.
- ✓ Plan which trees to cut and what their purpose will be.
- ✓ Record your plan.

## Notes:

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## Questions:

- ✓ Why does the way we cut trees matter?
- ✓ How will your choice affect the forest, the logs you get, and the community?

## Success Criteria:

- ✓ Students can plan which trees to cut or keep and decide how each will be used.
- ✓ Students can explain their choices and show understanding of sustainability and forest health.

## Extra Challenge!

Can you find out how many Karearea live in your local area?



# Challenge Part 1

Learning Intention: Students will understand how harvesting choices affect the forest, the uses of trees, and sustainability.

## Tasks:

Explore your forest notice tree sizes and terrain.  
Choose a harvesting method for your area.  
Plan which trees to cut and what their purpose will be.  
Record your plan

## Questions:

Why does the way we cut trees matter?  
How will your choice affect the forest, the logs you get, and the community.

## Success Criteria:

- Students can plan which trees to cut or keep and decide how each will be used.
- Students can explain their choices and show understanding of sustainability and forest health.



# Challenge Part 2

Students will understand how measuring, cutting, and allocating trees affects timber use, by-products, and sustainability.

## Tasks

- Measure trees in Minecraft
- Use blocks to estimate tree height and trunk size.
- Record measurements for each tree to help decide its best use.
- Harvest (cut) the trees
- Decide on your timber and by-products

Decide what different logs will be used for:

## Question:

What trade-offs did you face when cutting and allocating trees?

## Success Criteria:

- Students can measure, cut, and allocate trees for different uses.
- Students can explain how their logging choices affect the forest and sustainability.



## Extension Activities for Gifted Students.

### Timber Transport & Logistics

Task: Students plan how to transport harvested timber or by products to different destinations in Totara World.

Consider truck capacity, fuel efficiency, and travel routes.

Solve problems like “how many trips will it take?” or “how can we reduce environmental impact?”

### Creative Activity-

Students imagine and design a new product made from trees or by-products in Totara World. This could be:

- A biodegradable material to replace plastic
- An insulation product for buildings
- A clothing or fabric innovation
- A new energy or construction product

Steps:

1. Identify which part of the tree your product will use
2. Decide the purpose of your product
3. Draw a diagram or Minecraft model showing how it is made.
4. Write a short description explaining:
  - Why it's sustainable
  - How it benefits the environment or community

Paideia Question for Thinking:

- How can we use trees in new ways to solve real-world problems?



## Modifications for students with learning needs

Pick one tree in Totara World Forest.

Harvest the tree in Minecraft and build a journey showing where it goes for timber, paper, or garden mulch ( or any other product you can think of)

Label each part using signs or book and quill with a short note like ' this helps people or this helps the environment.

Question- Why do you think it is important to use trees carefully?

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# Extra Challenge

## Timber Journey in Minecraft!

**1. Pick a Tree:** Choose one or two trees in Totara World.

**2. Harvest & Build:** Chop the tree and build where it goes – timber, paper, firewood, or by-products.

**3. Label It:** Add signs or books to show “Helps People” or “Helps the Environment.”

**4. Share Your Journey:** Show your build to a classmate.

### Success Criteria:

- ✓ I can show the journey of a tree in Minecraft!
- ✓ I can explain why my choices help people and the environment!

### Extra Challenge!

#### Protect the Karearea!

Build a safe spot around the falcon's nest on the ground before you harvest the tree!



## Resources & Tools

- Minecraft Totara Forest
- Minecraft Forest Planning Worksheet (Sketch, species table, reflection space)
- Images of exotic forests and NZ forests
- Optional: digital time-lapse videos of forest growth  
<https://www.canopy.govt.nz/>



<https://www.discoverforestry.co.nz>

