



The Crown Estate Sustainability Initiative

The Woodland Way lesson

Teacher guide

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OVERVIEW

Thank you for downloading these resources to use with your students. By equipping your students with the knowledge and skills to understand biodiversity, nature recovery, and sustainability, you are empowering them with the tools to take positive action in their own communities, now and in their futures.

This lesson links to the Woodland Way section in the Conservation Quest at Windsor Great Park.

Students will:

- Recall their knowledge of why trees are important.
- Understand the roles of different woodland and forestry workers.
- Apply their understanding to solve issues through forest management.
- Review their understanding and consider a Forestry role for themselves.

Throughout the lesson, you will find background information on each topic. **There is also a glossary of key terms at the end.**

To find out more about how to use these resources, watch our teacher video on the website.



OUTCOMES

Students will understand the different roles in managing a healthy forest, potential issues and who can manage threats to woodland.



SKILLS

Teamwork, communication, critical thinking



VOCATIONS

Forest Manager, Outreach Officer, Wildlife Conservation Manager, Tree Surgeon, Timber Processing Manager, Ancient Woodland Inventory Officer, Recreation Officer, Forestry Workers, Safety Officer, Carbon Storage Expert.



RESOURCES

- Presentation slides
- Forest roles information cards
- Score sheet



TIMINGS

We have included activities for your class that develop themes from the Minecraft worlds. They are sequenced to build on each other, but we encourage you to pick and choose the ones that will work best for your class and the time available. We have included approximate timings as a guide, but you may wish to spend longer on certain sections.

CONTENTS	TIME	PAGE
Introduction and gameplay	25 minutes	2
Starter activity – Why are trees important?	<10 minutes	3
Main activity – Forestry game	20 minutes	4-5
Careers activity – What forestry job could you do?	10 minutes	5
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Stats quoted in these lesson packs refer to the UK.



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Introduction

 (2 minutes)

- Introduce students to the Conservation Quest at Windsor Great Park that they are about to explore. Explain that this world will highlight biodiversity, sustainability and ecology and how our decisions can impact this in the long term.
- In the Woodland Way, students must help Miss Bonnet protect the woodland saplings. When the deer enter the area, students need to fence as many saplings as possible before the deer get them and time runs out.
- The player must then find their way around the woodland maze to complete a Biodiversity Inventory.

Minecraft gameplay (Slide 1)

 (20+ minutes)

- When they launch the world, students will enter the lobby and meet Dotty the Dragonfly, their helpful guide. To take part in each challenge, students can visit the Windsor School from the estate office. In the school, there are four classrooms - and from each one, students can teleport instantly to a different challenge.
- For the purpose of this lesson, you may wish to direct students to teleport directly to the Woodland Way but they can come back and explore the world in their own time too.
- Consider sharing the reflection questions below with your students before they explore the world, so that they can keep them in mind throughout and ahead of class discussion.



Reflecting on gameplay (Slide 2)

 (5 minutes)

- Facilitate a class discussion about the activity, encouraging students to reflect on new knowledge gained, anything they found challenging/easy/interesting.
- To steer discussion, you could ask them:
 - Where is the activity based?
 - What has happened so far?
 - What did you find out about the trees in Windsor Great Park?
 - What do the conservation team do?
 - Which animals did you meet in the woodland maze?





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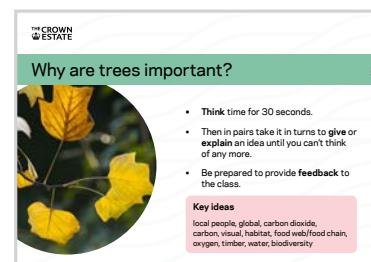
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Starter activity – Why are trees important? (Slide 3-4)

 (<10 minutes)

This activity will get students thinking about why trees are important.

- Show **slide 3**. Ask students to think of as many reasons as possible that trees are important. Ask them to do this individually (give them 30 seconds to think), then in pairs taking it in turns to give ideas until they can't think of any more (up to 2 minutes).
 - The slide includes some key terms to aid discussion and support lower prior attainers and those with SEND.
- Ask one student from each pair to feed back to the class.
- Prompt for additional ideas throughout with questions based on the background info, such as:
 - Which gas do trees give off that we breathe in? Which gas do trees take in that we breathe out?
 - Why is the fact that trees take in carbon dioxide important?
 - How can the wood from trees be useful?
 - Are there any other living organisms in or on trees?
 - How are forests involved in the water cycle?
- Clarify the key information about the importance of trees (**slide 4**). Tell students this lesson is all about trees.



BACKGROUND INFORMATION

The importance of forests

Biodiversity: Forests are home to millions of species of plants and animals, many of which are not found anywhere else on the planet. They help maintain the Earth's biodiversity.

Carbon storage: Forests play a critical role in mitigating climate change by absorbing carbon dioxide from the atmosphere and storing it in trees, soil, and other vegetation.

Oxygen production: Trees absorb carbon dioxide and release oxygen through photosynthesis, which helps to replenish the air we breathe.

Water cycle: Forests are an essential component of the water cycle, as they regulate the amount of water that evaporates from the ground, which affects rainfall patterns and helps to prevent flooding.

Soil conservation: Trees help to prevent soil erosion and maintain soil fertility, which is essential for agriculture and food production.

Economic value: Forests provide important economic benefits, including timber, non-timber forest products, recreation and ecotourism.

Cultural significance: Forests are often deeply rooted in the cultural and spiritual practices of indigenous communities around the world, and they provide a sense of place and connection to the natural world.



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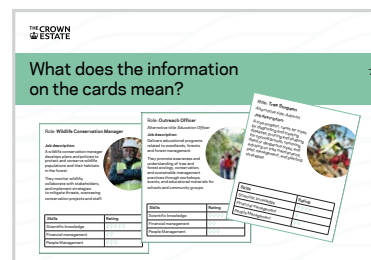
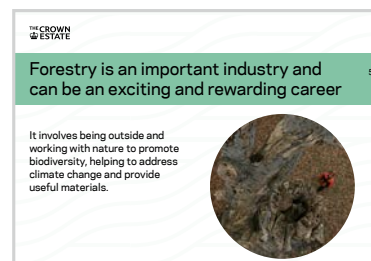
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Main activity – Forestry game (Slide 5-24)

 (20 minutes)

- Share **slide 5** introducing the role of a forestry worker and remind students that they will have met Linden, the Forester, in the gameplay.
- Explain to students that Linden isn't the only person with a job based on the forest. Tell them they are going to play a game based on solving challenges using the skills of lots of different forestry workers.
- Hand out the Forest Roles information cards and give students a few minutes to read them. Encourage them to ask clarifying questions about words or information they don't understand (**slide 6-7**).
- Read the rules of the game (**slide 8**). Ensure students understand that they can select three cards and specify how many students are in each team. They can score a maximum of 5 points each round.
- Play through the example and game rounds (**slide 9-24**).
- For each round, give students 1-2 minutes to think and discuss then ask a nominated student to stand up and display their team's three choices (so each team's student #1 on round 1, student #2 on round 2, and so on...)
- At the end of the round, tally up each team's points on the score sheet (you may want to do this yourself or chose an enthusiastic student to keep score).
- At the end of the game, tally up the scores and congratulate the teams.



BACKGROUND INFORMATION

The importance of forests

Forestry jobs are a range of occupations that involve the management, conservation, and use of forests and forest resources. They include Forest Manager, Education & Recreation Officer, Climate Change Expert, Wildlife Manager, Tree Surgeon, Timber Processing Manager and Ancient Woodland Inventory Officer. These jobs are important for several reasons:

Sustainable forest management: Forestry jobs play a crucial role in ensuring that forests are managed sustainably, with consideration given to the long-term health and productivity of the forest ecosystem.

Forest conservation: Forestry jobs can help to protect and conserve forests and wildlife habitats, ensuring that forests remain healthy and productive for future generations.

Timber production: Forestry jobs can involve the sustainable harvesting of timber, which is a valuable natural resource that supports many industries and provides employment opportunities.

Wildlife management: Forestry jobs can involve managing wildlife populations, ensuring that they are healthy and that their habitats are protected.

Education/ Recreation management: Forestry jobs can involve educational outreach to raise awareness of the importance of the forest and providing opportunities for people to connect with nature and enjoy outdoor activities such as hiking and camping.



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Main activity - Forestry game (Slide 5-24) Cont'd

 (20 minutes)

Making the game work for your class:

- Keep going for as many rounds as you think will work for your class and students - we have provided an example scenario and seven rounds (A-F and a tie breaker) but you can create your own if you want.
- If you want to create more discussion, you may want to ask students to explain their choices or to think about other scenarios different roles might be helpful in tackling.

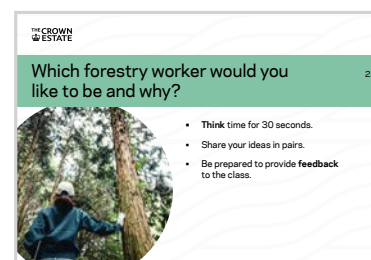


Careers activity - What forestry job could you do? (Slide 25)

 (10 minutes)

Student review/discussion (show slide)

- Ask 'Which forestry worker job would you most enjoy?' (slide 25).
- Give students 30 seconds of individual thinking time.
- Tell students to take turns to share their idea in pairs. Remind them to think about the skills different roles use.
 - Which do they think they would be best at?
 - What skills do they already have for that job?
 - What other skills would it need?
 - What subjects or qualifications do they think would be most useful for this job?
- Call students from different pairs to feedback on their discussion.
- End by telling students that they are all already developing some of the skills that could help them thrive in lots of careers, including important ones such as protecting nature.
- Emphasise the importance of transferable skills like teamwork and communication across all these jobs and more.

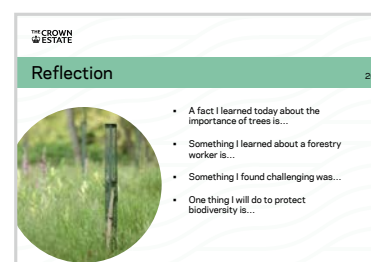


Reflection

 (5 minutes)

Before finishing the lesson, encourage your students to reflect on their learning.

- Ask your students to use the following sentence starters to reflect:
 - A fact I learned today about the importance of trees is...
 - Something I learned about a forestry worker is...
 - Something I found challenging was...
 - One thing I will do to protect biodiversity is...
- Depending on your class, you may wish to do this one by one or invite volunteers to take turns.





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Real world action

Building student agency with real world action

By taking part in this lesson, students have developed their:

- knowledge of a key sustainability topic
- understanding of why it is important
- practical toolkit, and articulation, of their own green skills

These are the ingredients that enhance students' agency and power to take real world action that builds biodiversity and supports nature recovery.

There are a number of ways you can support them to take their learning forward and continue this process beyond the classroom. We have a few starter ideas for you below:

- Take students on a field trip to a local forest, woodland or park to give them an up-close look at trees.
- Invite a local forestry expert or arborist to speak to your class about the importance of trees.
- Engage students in hands-on activities such as planting trees or measuring their growth.
- Conduct science experiments related to trees and forestry, such as measuring the amount of carbon dioxide absorbed by trees or investigating the effects of deforestation.
- There are activities to get students engaging with forestry and trees on the following websites:
 - The Woodland Trust (<https://www.woodlandtrust.org.uk/support-us/act/your-school/resources/>)
 - Chartered Foresters (<https://www.charteredforesters.org/what-we-do/education-careers>)
 - Forestry England (<https://www.forestryengland.uk/learning>)

Lesson 5 in this series – Taking action toolkit

For more ideas on safe and manageable ways to harness the enthusiasm your students may have for this or other biodiversity topics, we have created a **Taking Action Toolkit**.

It features accessible principles to empower students to identify key issues that they care about, affecting their school/local community, and begin creating meaningful solutions for nature recovery with their peers.





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Glossary

- **Arborist:** A professional who specialises in the cultivation, management, and study of trees, shrubs, and other perennial plants.
- **Carbon storage:** The process by which carbon dioxide (CO₂) is removed from the atmosphere and stored in trees, plants, and other vegetation. Trees are important carbon storage systems and play a critical role in mitigating climate change.
- **Forestry:** The science, art, and practice of managing forests, including the production of wood and other forest products, as well as conservation, recreation, and other benefits.
- **Tree surgeon:** A professional who specialises in the care and treatment of trees, including pruning, shaping, and removal. Tree surgeons are also known as arborists.

