

Sustainability

GRADES 6–8

Guiding Question

How can we help ensure that forests and other resources are used sustainably?

Connecting Concepts

- Human activities have significantly altered the biosphere, sometimes damaging or destroying natural habitats and causing the extinction of other species. But changes to Earth’s environments can have different impacts (negative and positive) for different living things. (NGSS, ESS3.C: Human Impacts on Earth Systems)
- Typically as human populations and per-capita consumption of natural resources increase, so do the negative impacts on Earth unless the activities and technologies involved are engineered otherwise. (NGSS, ESS3.C: Human Impacts on Earth Systems)
- Humans depend on Earth’s land, ocean, atmosphere, and biosphere for many different resources. Minerals, fresh water, and biosphere resources are limited, and many are not renewable or replaceable over human lifetimes. These resources are distributed unevenly around the planet as a result of past geologic processes. (NGSS, ESS3.A: Natural Resources)
- Many forest owners and operators choose to certify their operations by an objective standard for sustainable forest management. Third-party independent auditors certify the land and provide assurance that legal, sustainable forest practices are being followed. (PLT FLF, 3.E.1)
- Resources that we use and consume every day are connected to forests. We have the opportunity to choose products (e.g., renewable, legally sourced, certified) that support sustainability. (PLT FLF, 4.A.2)

Scope and Sequence

The collection and order of content below supports an intentional student learning progression.

Activity	Description
Decisions, Decisions	Students compare options for using a piece of land, taking into consideration the various stakeholders and viewpoints.
Exploration Energy!	Students learn about different sources of energy, conduct an audit of the electricity they use in their own homes, and create an action plan to use energy wisely.
Peek at Packaging	Students examine the pros and cons of different packaging and then design an “ideal” package.
Global Goods	Students trace the resources that go into making one product.
Renewable or Not?	Students model what happens to renewable and nonrenewable resources over time and discover why sustainable use of natural resources is so important.
Reduce, Reuse, Recycle	Students analyze the waste they generate over a period of time and find out what happens to various types of waste when it is discarded.
What’s in a Label?	Students explore criteria for forest certification and consider possible benefits and limitations of certification.
If You Were the Boss	Students play the role of forest manager for a public forest, exploring the complex factors that influence management decisions about forest lands.

See plt.org/academic-standards for detailed standards correlations for each activity.

Storyline continued on next page.



Sustainability (cont.)

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- Begin with the activity *Decisions, Decisions*, in which students determine the fate of two different plots of land. Encourage students to think about the long-term consequences of their decisions and ask them how sustainability applies to these scenarios.
- Next, use the *Exploration Energy!* activity to examine whether different energy resources can be used sustainably and, if so, how.
- In the next four activities—*Peek at Packaging*; *Global Goods*; *Renewable or Not?*; and *Reduce, Reuse, Recycle*—students focus on consumer products and their impact on sustainability. Encourage students to articulate what they learn about sustainability.
- Next, use the activity *What's in a Label?* to explore forest product certification as one of the tools available to ensure sustainable forest management. Ask: What are other ways we can ensure the sustainability of forests and forest resources?
- Conclude with the activity *If You Were the Boss*, in which students develop a management plan for a forest. Challenge students to develop a plan that would be sustainable over time. In culmination, ask students to describe what people can do to help make sure that forests and other natural resources are used sustainably, using evidence from the unit activities to support their ideas.

