



SPROUTS' MONTHLY BOOK



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October 2025 Monthly Book

Forestry Forever. Growing Trees for Future Generations

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Grade Levels Suggested: Fifth

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Scan here for Lesson Slides!



October Slides

Science Lesson

Grade Level:

- Fifth

Time length of the lesson:

- 1 hour

Standards Addressed:

- **Fifth**
 - 5-ESS3-1. Evaluate potential solutions to problems that individual communities face in protecting the Earth's resources and environment.

Objective of the lesson:

- I can evaluate potential solutions to problems that individual communities face in protecting the Earth's resources and environment.

National Agricultural Literacy Outcomes:

- T1.K-2.c Identify natural resources.
- T1.3-5.a Describe similarities and differences between managed and natural systems (e.g., wild forest and tree plantation; natural lake/ocean and fish farm).
- T1.3-5.c Identify land and water conservation methods used in farming systems (wind barriers, conservation tillage, laser leveling, GPS planting, etc.).
- T1.3-5.d Identify the major ecosystems and agro-ecosystems in their community or region (e.g., hardwood forests, conifers, grasslands, deserts) with agro- ecosystems (e.g., grazing areas and crop growing regions).
- T1.3-5.e Recognize the natural resources used in agricultural practices to produce food, feed, clothing, landscaping plants, and fuel (e.g., soil, water, air, plants, animals, and minerals).
- T2.K-2.a Explain how farmers/ranchers work with the lifecycle of plants and animals (planting/breeding) to harvest a crop.
- T2.K-2.e Identify the importance of natural resources (e.g., sun, soil, water, minerals) in farming.
- T2.3-5.e Understand the concept of stewardship and identify ways farmers/ranchers care for soil, water, plants, and animals.
- T4.3-5.a Compare simple tools to complex modern machines used in agricultural systems to improve efficiency and reduce labor.

- T4.3–5.d Provide examples of science being applied in farming for food, clothing, and shelter products.
- T5.K–2.d Identify plants and animals grown or raised locally that are used for food, clothing, shelter, and landscapes.
- T5.K–2.e Identify the people and careers involved from production to consumption of agricultural products.

Materials list:

- Computer
- Projecting screen
- Pencil
- Paper

Instructor procedure:

- The teacher will read the I can statements
 - I can evaluate potential solutions to problems that individual communities face in protecting the Earth's resources and environment.
- The teacher will share vocabulary with the students:
 - Bulldozer: A Large powerful piece of machinery with wide tracks and a large blade on the front to clear dirt and debris. Also used to push/pull other implements.
 - Bedding Harrow: A piece of site preparation equipment pulled by large bulldozers to create beds for planting seedlings on top of.
 - Electrician: An individual who works on electrical equipment and maintains its use.
 - Feller Buncher: Cuts trees hydraulically and lays them down in bunches, ready to be pulled to log decks.
 - Grapple Skidder: Drags felled trees to the log deck.
 - Log Truck: Hauls harvested logs from private landowners' landings to the paper mills and sawmills. Each load is about 28 tons of wood.
 - Maintenance: Making routine inspections and repairs to all equipment to ensure it works properly and is functional for use.
 - Manager: A person responsible for planning, coordinating, and supervising of work to be done by the people and equipment in an operation.

- Papermaker: An Individual who works in a paper mill on the paper machine.
- Papermill: A Huge factory that executes all the functions of making paper. Provides hundreds of high-paying jobs.
- Plumber: Individuals that work with pumps and piping to keep liquids of all types flowing properly.
- Prescribed burning: the act of burning to reduce competition for the pine trees to prevent wildfires. Improves wildlife habitat.
- Poles: the straightest and best formed trees harvested can be sold for high value telephone poles, dock piling, and other highly profitable uses.
- Pulpwood: the first wood harvested from the tree stand.
- Pulp: Wood fiber reduced to a pulp using high temperature and chemical treatment. This pulp is used for paper and diapers.
- Saw timber: Larger diameter trees harvested from second and third thinnings and final harvest when cut into sawn boards for building structures.
- Tract: An area of land often 100 acres or less.
- Woodyard: the large space where logs are brought into the papermill to be sorted, debarked, and chipped into small woodchips.
- The teacher will explain that forestry is a practice that is essential to our lives as well as the health of the environment.
- The teacher will ask students what trees are used to create.
 - Ex. Lumber for houses, decks, bridges, fences, and doors, tables, chairs, cabinets, beds, handles for tools, baseball bats, musical instruments, toothpicks, clothespins, wooden spoons, cardboard boxes, paper bags, egg cartons, notebooks, envelopes, wallpaper, tissues, toilet paper, paper towels, books, magazines, coffee filters, natural dyes, turpentine, pitch, eyeglass frames, toothbrush handles, cork, soap, wax, and even ingredients for toothpaste and certain foods.
- The teacher will explain that we need these materials, but that every action (or not acting) has a consequence that will result in someone having to repair the environment.
- The teacher will read *Forestry Forever*.

- As the teacher is reading, the students will raise their hands when they hear a solution to a problem that communities face in protecting the Earth's resources and environment. The teacher will pause and allow students to share the problem and solution aloud.
 - Ex. unmanaged land is a problem that is solved by a management plan, Lowcountry soils are wet is a problem that is solved by bedding, etc.
- The teacher will have a poster saying:
 - The key components of the forest system are _____.
- The students will write key components of the forest system on sticky notes and put them on the poster.
 - Ex. Trees, grass, water, sunlight, animals, etc.
- The teacher will ask students to complete a think-pair-share activity. The teacher will ask students to think about potential problems that are faced within the forest system.
 - Ex. overgrowth of weeds and underbrush.
- The teacher will ask students to complete a think-pair-share activity. The teacher will ask students to think about potential solutions to solve the problems they posed.
- The teacher will explain the poster activity and explain the [rubric](#) provided.
 - The students will create a rough draft of a poster prior to making the rough draft.
 - Students can use the following sentence stems.
 - The key components of the forest system are _____.
 - In the system, _____ and _____ interact in _____ way.
 - The problems is _____ because.
 - If I/you change _____ in the system, _____ will occur.
 - The Solution is _____ because.
- Early finishers will read the following [book](#)

Assessment:

- **Assessments**
 - Informal:

- Students raise their hands when they hear the solution to a problem that communities face in protecting the Earth's resources and environment.
 - Forest System key components sticky note activity.
 - Think pair share
- Formal
 - Problem and solution poster.
- **Early finishers:**
 - Early finishers will read the following [book](#)

Additional resources which enhance the lesson:

- **Activities:**

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- **Ag Mags:**

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- **Resources:**

- [Forestry tools](#)
- [Learning Resources – THE TINY TIMBER CREW](#)
- [PEOPLE OF FORESTRY](#)
- [South Carolina Forestry Commission – YouTube](#)
- [Southern Group of State Foresters – YouTube](#)
- [How Drones are Helping to Plant Trees – A Cleaner Future – Curriculum Matrix | National Agriculture in the Classroom](#)
- [Forestry | Oklahoma Agriculture in the Classroom](#)
-  [GAE Lesson Plan – Forestry.pdf](#)
- https://www.georgiaagexperience.org/skins/userfiles/files/Forestry%20act_%20page.pdf
- <https://www.youtube.com/watch?v=KrMzImSuvXU>
-  [Farm Life 360° – Virginia Forestry](#)
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- **Books:**

- [Why Would Anyone Cut a Tree Down](#)
- [Forest Trees of South Carolina](#)

- <https://www.tinytimbercrew.com/books>
- [The Tree Farmer – Curriculum Matrix | National Agriculture in the Classroom](#)
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- **Additional Lesson Plans:**
 - <http://www.langdale-company.com/wp-content/uploads/2020/11/TreeGrowthAndProducts3-5.pdf>
 - <http://www.langdale-company.com/wp-content/uploads/2020/11/CaringForOurTreesTodayAndForTheFuture3-5.pdf>
 - <http://www.langdale-company.com/wp-content/uploads/2020/11/EnvironmentalServicesLessonPlan3-5.pdf>
 - <http://www.langdale-company.com/wp-content/uploads/2020/11/EngineeringDesignUsingWoodProducts3-5.pdf>
 - <https://cdn.agclassroom.org/mi/lab/lesson/forestry.pdf>
 -
- **South Carolina Agricultural Information**
 - [State Agricultural Facts](#)
 - [TOP COMMODITIES](#)
 - [Teacher Center | National Agriculture in the Classroom](#)
 - [Food & Farm Facts | South Carolina Farm Bureau](#)

Resources:

Rubric

Problem Listed	Problem is listed.	/4
Problem Explained	The student clearly explained the problem and how it affects the key components of the forest system.	/6
Solution Listed	Solution is listed.	/4
Solution Explained	The student clearly explained a potential solution to the problem posed.	/6
Key components of forest system are included	Student has identified and included all key parts of the forest system that could be affected by the problem posed.	/4
Presentation	The poster is neat, colorful, and shows best effort	/3
Rough Draft	Rough draft is included.	/3
/30		

References:

Benchmarks related to agricultural literacy and academic ... National Agricultural Literacy Outcomes. (n.d.).

<https://cdn.agclassroom.org/nat/data/get/NALObooklet.pdf>

Standards. South Carolina Department of Education. (n.d.).

<https://ed.sc.gov/instruction/standards/>

