

Tree Nurseries – Planting for the Future in Uganda

TEACHER: *Today we will learn about tree nurseries. Are the trees in this picture big or small?*

STUDENTS: *small*

They are very small. A tree nursery is a place where seeds are planted to grow new trees. Young trees are called “seedlings,” and need extra care and protection when they are small. How is a tree nursery like a nursery for a baby?

They are both safe places for things when they are small.

A baby nursery is a safe place where people care for a little baby while it still needs a lot of help. A tree nursery also provides a safe place for the seedlings to grow while they are still small. If you were taking care of tree seedlings, what do you think you would need to do to make sure they grew?

Give them water, sunlight, soil, food (nutrients), space, and protection

Not all trees are the same, and they often need different things to help them grow. Nevertheless, most trees need water, sunlight, soil, food (nutrients), and space in order to be healthy and grow strong. Look closely at the picture. The sticks and grass around the seedlings are called a “shelter.” Why do you think people in Uganda build shelters around the seedlings?

To protect them

A shelter is like a little house for the seedlings. It helps to protect them. Many animals, like goats and cows, like to eat the little trees, or they accidentally crush them when they are walking through the fields. By putting all of the trees together under the shelter, it makes it harder for the animals to eat or step on them. Why don't people in Uganda build a shelter with walls and a real roof?

The trees need air, light and rain to grow.

In the forest, tree seedlings grow under the branches of larger trees and plants. The shelters are like a pretend forest. A thick layer of grass is put on top of the sticks when the seedlings are still very small. The young trees need to get some sun and rain, but too much will hurt them. As the seedlings grow, some of the grass will be removed, to let more rain and sunlight through. When they are bigger, all of the grass will be removed to make sure they are strong enough to be planted.

Who do you think will plant these trees?

Farmers, schools, environmental clubs, etc.

These trees are being planted by kids at their schools. In some places in Uganda, people are cutting down trees, and not replanting new ones. This tree nursery is located at the Jane Goodall Environmental Education Center in Hoima, Uganda. Kids and adults come to the nursery to learn about why planting new trees is important for the environment, animals and humans. People are learning how to plant trees with their crops at home and at school. This is called "agroforestry." What will happen if people continue to cut down trees and not plant new ones?

It will hurt the land; animals will lose their homes; people won't have wood; etc.

Trees are a fantastic natural resource. As you know, people all over the world use trees for building, cooking, arts and crafts, transportation, medicine, food, etc. Trees are not only important to people, they are also necessary for keeping the natural world healthy. Many other animals and plants depend on trees for their survival.

Without trees, many animals would lose their homes. People would not have firewood for cooking. The land would become dry and easily wash away. Water would become polluted from soil runoff. Rain patterns would change. The air would be dirtier. And, there would be no shade for people during warm weather.

To help protect trees, people in many countries around the world have a rule. For each tree that is cut, a new tree needs to be planted. Do you think this is a good rule? Why or why not? What could make it better?

Yes, so new trees will always be growing; People could even plant two trees

Replacing the trees you cut, is a good way to keep the forest strong and healthy into the future. Every year, people around the world use more and more trees. Trees can take five, ten, twenty or even thirty years before they are big enough to be cut and used. It is important that people all over the world practice "sustainable forestry." Sustainable forestry means that people only cut the trees they really need, and always plant new trees in their place. This way, the forest stays strong, and it helps to keep the water, air, soil, and other plants and animals healthy too.

Can you think of ways that kids can help protect forests at home and school?

Reuse and recycle paper; reduce the amount of paper you use for napkins, tissues, paper towels, etc.; plant new trees; be kind to the trees that grow in your yard or on the school grounds; keep the environment clean; teach others about the importance of trees; etc.

Wow! You thought of a lot of great ideas. Kids can do many things to help keep forests healthy. Now that you know so much about trees, be sure to teach others! Everyone needs to plant and protect trees today, so they will be around to use and enjoy in the future. Remember...the best time to plant trees is now!

Kindergarten Standards:

NYS Common Core Kindergarten Social Studies Standards

- K.8.a Climate, seasonal weather changes, and the physical features associated with the community and region all affect how people live.
- K.11.a A need is something that you must have for health and survival, while a want is something you would like to have.

Kindergarten ELA Power NYSCCLS (ICSD Power Standards in Bold)

Reading Standards for Informational Text: Kindergarten

- **Integration and Knowledge of Ideas**
 - 7. With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).**

Writing Standards: Kindergarten

- **Research to Build and Present Knowledge**
 - 8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.**

Speaking and Listening Standards: Kindergarten

- **Comprehension and Collaboration**
 - 1. Participate in collaborative conversations with diverse partners about *kindergarten topics and texts* with peers and adults in small and larger groups.**
 - a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).**
 - b. Continue a conversation through multiple exchanges.**
 - c. Seek to understand and communicate with individuals from different cultural backgrounds.**
 2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
 - 3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.**
- **Presentation of Knowledge and Ideas**
 - 6. Speak audibly and express thoughts, feelings, and ideas clearly.**

Language Standards: Kindergarten

- **Vocabulary Acquisition and Use**
 - 6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts.**

Next Generation Science Standards for Kindergarten

K-ESS2 Earth's Systems

- ESS2.E: Biogeology
 1. Plants and animals can change their environment. (K-ESS2-2)
- ESS3.C: Human Impacts on Earth Systems
 1. Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things. (secondary to K-ESS2-2)

K-ESS3 Earth and Human Activity

- ESS3.A: Natural Resources
 1. Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)
- ETS1.A: Defining and Delimiting an Engineering Problem
 1. Asking questions, making observations, and gathering information are helpful in thinking about problems. (secondary to K-ESS3-2)