Grade Level/Subject: K-1st grade
Program: Trees, Please!

Stage 1 – Desired Results

Established Goal:
Students will be able to explain why plants are important and will be able to name the parts of a plant and their functions.

Standards: K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive.

1-LS1-1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

Takeaways:

- Students will be able to name what parts of a plant are.
- Plants need water, sunlight, air, and nutrients to grow.
- Some plants require a lot of water while others require very little.
- Some plants belong here and other plants were brought here from other places.
- People, animals, and insects depend on plants for various resources.

Essential Questions:

- What do plants provide for people?
- What do plants provide for animals?
- What does a plant need to grow?

Student Objectives: *Students will know . . .*

- Students will know that each part of the plant has a specific function.
- Students will know that every different species of plant produces a different type of seed.
- Students will know that seeds have a protective outer shell to help ensure they grow a new plant.
- Students will know that animals, insects, water, gravity and wind move seeds from one location to another.

Stage 2 – Assessment Evidence

Performance Tasks:

- Starter- Woodpecker phenomena
  - Reviewing how animals can change their environment to meet their needs.
- Why people and animals need plants?
- What are parts of a plant?
- How do seeds disperse?
- What do we need to grow a plant?
- Wrap up questions to check for comprehension.

Other Evidence:

- Comprehension checks during the program.
- Wrap up questions to check for comprehension.

Stage 3 – Learning Plan

Learning Activities:

- **Teacher will create the initial interest in the topic by beginning with phenomena.**
  - **Ask students:**
    - **What do you see?**
    - **What do you notice?**
    - **What are you wondering?**
- **Teacher will make sure the students understand the key concepts by asking comprehension-checking questions throughout the program.**
- **Teacher will ask the students questions after the program and evaluate if they understood the key concepts taught during the program.**
- **After the program, teacher will engage students in companion activity to reinforce topic.**
  - **Kinder: Students will observe plants that are watered and not watered and that receive light and do not receive light and journal their findings.**
  - **1st Grade: Students will view examples of biomimicry and design a solution to a human problem by mimicking how plants and/or animals use their external parts.**
    - **Example: Using a leaf to design a solar panel in order to use renewable resources more efficiently.**
- **The program incorporates multiple strategies for reaching the different types of learners including visual and audio.**
- **The program is designed to keep the students engaged during the entire program to maximize the amount of learning that is possible.**

Vocabulary Words

- **Carbon dioxide**
- **Compost**
- **Conservation**
- **Decompose**
- **Environment**
- **Germination**
- **Habitat**
- **Invasive species**
- **Native Plant**
- **Natural Resources**
- **Photosynthesis**
- **Pollination**
- **Species**