

**Intended for Grades:** 5<sup>th</sup>- 6<sup>th</sup> **Est. Time:** 30-60 min.

**Lesson Title: WHAT'S THE BIG DEAL ABOUT TREES?**

**Lesson Purpose:** Students will:

- \* Deepen their sense of place and understanding about the importance of trees
- \* Understand the interdependence between plants and humans

**Materials & Preparation:**

- \* "How Trees and Plants Help Me" - read aloud for students (see below)
- \* O<sub>2</sub>/CO<sub>2</sub> illustration
- \* Optional reading: "The Lorax" by Dr. Seuss, available at most libraries

**Background Information:**

Having respect for something can be gained by deepening understanding. With a focus on the critical importance of the symbiotic relationship between animals and plants, students will hopefully gain respect for our natural environment and the desire to help maintain this natural balance on Earth so important to the survival of all life.

**Steps:**

1. Project the poster about Oxygen (O<sub>2</sub>) and Carbon Dioxide (CO<sub>2</sub>); invite students to review it before the class discussion starts.
2. Ask questions to assess prior knowledge about this topic. You can ask:
  - a. Why are trees and plants "a big deal" and so important to humans and animals?
  - b. Do you know what O<sub>2</sub> means? (Oxygen) Or what CO<sub>2</sub> represents? (Carbon Dioxide)
  - c. How do you think these two elements might support life on earth?
3. Project the short article: "How Do Trees and Plants Help Us?" and facilitate a read aloud by students.
4. Next, place the O<sub>2</sub>/CO<sub>2</sub> image on the overhead and discuss the interdependence between humans and trees. Questions to prompt discussion include:
  - \* *What are some other uses we have for trees?* (Shade, beauty, food, paper, baseball bats, houses, tables, chairs, books, blocks, ukulele, grocery bags, pencils, *imu* wood, egg cartons, kites, chopsticks, rubber, toilet paper, etc.)
  - \* *What could cause a shortage of trees and plants?* (Define "Deforestation": the removal of a forest or stand of trees where the land is thereafter converted to a non-forest use).
5. Share the following data:
  - As of 2011, about half of the world's original forests were classified as destroyed.
  - More than half of the animal and plant species in the world live in tropical forests.
  - In Hawai'i, only 1/4 of the natural forests remain.
  - Hawaii's deforestation is due to: \* Timber over-harvesting \* Sugar & pineapple plantation development \* Tourism industry \* Urban expansion (increased population)
  - Deforestation can also cause mass extinction of Hawaii's native plant and animals.

6. Work with students to brainstorm ways they can help make sure there are enough trees and plants for the generations to come. List ideas, and if possible, identify one that students can select to work on.

7. Extending the lesson - Follow up possibilities:

- \* Teach the “Ha-Breath of Life” lesson (GPS Curriculum, self section).
- \* Study native Hawaiian plants and animals.
- \* Have a plant-a-(native) tree day on campus.
- \* Study photosynthesis.
- \* Watch the movie “The Lorax” by Dr. Seuss.

**Reflection Questions:**

- \* *Why is it important to protect forests around the world?*
- \* *What do you think a world without enough trees would be like?*
- \* *How can we all help others understand what “the big deal” is about trees?*

**Resources:**

<https://eo.ucar.edu/kids/green/cycles6.htm>

[http://www.ducksters.com/science/ecosystems/oxygen\\_cycle.php](http://www.ducksters.com/science/ecosystems/oxygen_cycle.php)

## How Do Trees and Plants Help Us?

“When you take in a breath, what happens? If you take a big breath, you can feel air going into your body through your mouth. But why do we breathe? We breathe because our bodies need something in the air called oxygen. Oxygen is like food for our blood. You can’t see oxygen, but it’s there in the air, and people and animals need it to live.

Your body changes oxygen into a different gas called carbon dioxide. Carbon dioxide is what comes out of your body when you breathe out. You breathe in oxygen, and you breathe out carbon dioxide.

Trees and plants don’t breathe oxygen as we do. They take in carbon dioxide and they put out oxygen — just the opposite of people and animals. So having lots of plants around is good for people and animals — plants and trees make the oxygen that we need to breathe.”