

## APCD Clean Air Ambassadors, Lesson 1

### The Lorax - Resources and Our Environment

**Targeted Grade Levels:** K - 3

**Objectives:** To demonstrate how air pollution affects not only humans, but plants and animals as well. To demonstrate that cutting down trees hurts the environment in a variety of ways, including air quality.

#### California Science Content:

- **Life Science K.2:** Different types of plants and animals inhabit the earth. As a basis for understanding this concept:
  - **A.** Students know how to observe and describe similarities and differences in the appearance and behavior of plants and animals.
  - **B.** Students know stories sometimes give plants and animals attributes they do not really have.
- **Life Science 1.2b:** Students know both plants and animals need water, animals need food, and plants need light.
- **Earth Science 2.3e:** Students know rock, water, plants, and soil provide many resources, including food, fuel, and building materials, that humans use.
- **Life Science 3.3c:** Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.
  - **3.3d:** Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.

#### Education and the Environment

##### Initiative:

- K - A Day in My Life; 1 - Finding Shelter; 1 - People and Places; Living Things in Changing Environments

##### Common Core:

- **K-LS1-1:** Use observations to describe patterns of what plants and animals (including humans) need to survive.
- **K-ESS3-3:** Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

**Procedure:** Read aloud *The Lorax* by Dr. Seuss emphasizing and highlighting the effects of

the Once-ler's activities (approx. 20 minutes).

### Before Beginning

- Make sure you are near a whiteboard with space to write on for the discussion portion of the lesson.
- Have students sit down on the ground facing you while you read the story and discuss.
  - "Hi everybody! Nice to meet you! We are very excited to be here today to talk you guys about air pollution! We are from Santa Barbara's Air Pollution Control District, I am Michaela and this is Maya"
  - "So the Air Pollution Control District is a lot of big words, but it basically means that we help protect the clean air that YOU breathe when you play outside and breathe all day long.
    - Who here likes clean air? Awesome! I hope you all do, I know Michaela sure does"
  - "Before we get started with our awesome activities, does anybody know what air pollution actually means?"
    - Ask a few students, try and get a variety of answers:
    - "Great answers guys! That's right, a simple way to define air pollution is harmful material in the air that is bad for plants, animals, and even humans."
  - "We have a special chant for you all! We'll be coming back later in the week to visit you, so follow along and hopefully by our last visit you will know it by heart. Michaela and I are going to show you how to do it first and then we'll do it altogether after!
    - When I say clean, you say air (Clean, Air)
    - When I say clean, you say air (Clean, Air)
    - Slap you knees twice, clap twice, snap twice
    - Clean Air!

**Transition:** "Now, we are going to share a story with you guys on how harmful air pollution is!"

- "Who here has read The Lorax Before??"
- "Who here has seen the movie?!"
  - "Excellent! Well today we are going to be reading a very special version of The Lorax. This time we are going to see how it relates to air pollution. Sounds good? Ok excellent! Now everybody pay special attention because we are going to be asking different questions throughout the story. And watch out for the Lorax, because he just might make a guest appearance!"

## Begin Reading “The Lorax”

- One instructor will read from the book and the other will do the voice-over for the Lorax while using the mustache every time he/she speaks
- Before class ask the teacher who the most responsible student is and choose them to be “the Chosen One”

### Pages 1-15: Introduction of the Lorax and the Once-ler

- **Pg. 1: First question - observing the gloomy scenery**
  1. “Can somebody raise their hand for me and describe the town that the little boy is walking through?”
    - Key points: the dark and dirty air, the dead trees, the sick bird, the dead soil
- **Pgs. 12-13: Transition into the nice scenery**
  1. “What do you guys notice is different on this page than the first pages we were on?”
    - Key Points: Many trees, colorful landscape, happy birds, healthy pond, clear blue sky, green grass
  2. “Can you guys take any guesses as to why trees are important?”
    - Key Points: they produce oxygen, they eat carbon dioxide, aka they clean our air, give animals homes, give animals food, etc (mention O<sub>2</sub> and CO<sub>2</sub> for older grades)
  3. “Can everyone take a deep breath, breathe in through your nose and out through your mouth?”
  4. “What are some ways in which we can help the trees? Any guesses??”
    - Key Points: planting trees, not cutting trees down, recycling, using less paper, telling your friends how important trees are
- **Pgs. 14-15: More happy animals**
  1. “So there are a lot more animals here. What does it look like they are doing?”
    - Key Points: Brown Barbaloots (bears) eating the Truffula Fruit, Humming Fish swimming in the pond
  2. “Do you have any idea why they have so much energy?”
    - Key Points: air is clean, they have enough food to be satisfied, sun is out, lots of water, it’s beautiful outside, etc

### Pages 16-33: Onceler creates his Thneeds business

- **Pg. 18: First demonstration of the chopping of a truffula tree**
  - Onceler dramatically chops down the tree with toy axe (first demonstration)
  - *The Lorax has a big reaction (i.e. gasps)*

- **Pg 20: Lorax's arrival in story**
  - (The instructor impersonating the Lorax will turn with their back facing the children and say loudly "ga-Zump!" when the reader say this line, "The instant I'd finished, I heard...")
  - (Lorax then goes to hand out truffula trees to students)
    - "I am the Lorax and I speak for the trees! These are truffula trees, one for each of you!!"
    - "I will tap one student to be the 'Chosen One!'"
    - "These trees are very important and they are for you to keep. You all can take out your markers and decorate your trees however you want."
    - "Okay, now we are going to keep reading the book. Your truffula trees will be reallyyy important later in the story, but for now take good care of them and keep them flat on your desk."
- **Pgs. 32-33: Intro of Super-Axe-Hacker**
  - Pretend to axe down the truffula tree pens with toy axe, every tree except for (the Chosen One)
  - "Ok so now everyone except the chosen one take their truffula trees and stand them up on your desk. When you hear the word smacker, you are going to drop your truffula trees because the super axe hacker will chop them down."
  - Read through it again
- **Pgs. 34-35: The Truffula trees aren't making enough fruit for the animals**
  1. "Can anyone guess why the Lorax is so unhappy right now?"
    - Key Points: animals don't have enough food to survive; the birds and bears must move to another environment with more food and shelter
- **Pgs. 38-39: Factory is expanding/fully in business**
  1. "Can you guys guess what type of building the Onceler is making his Thneeds in?"
    - "Hint, it starts with a 'F'. That's right! A factory!"
  2. "What is all of this stuff coming out of the top of the factory building?"
  3. "Put your thumbs up or down, would you want to breathe that air coming out of the factory?"
    - "No! Gross, exactly! So if it's bad for us to breathe, and probably bad for the trees and animals, what is this bad, dirty air called??"
      - "Air Pollution! Perfect!"
- **Pg. 40: \*\*Reinforcement Question\*\***
  1. "Where does the smogulous smoke come from again?"
    - Key Point: the FACTORY!
- **Pgs. 50-51: The last Truffula tree is chopped down**
  - "Chosen One, hold up your truffula tree. When you hear the word "whack", chop down your tree!!!"
- **Pg. 52: No more work to be done (emphasize Onceler's family are out of jobs**
  - "Now that the trees are all gone, everyone has to leave because it's hard to breathe since there's no more trees. Isn't that sad? Everyone now has no job left and needs to leave their home because they used up ALLLL the trees."

Pgs. 56-61: Concept of **UNLESS** and the dreary/gloomy aftermath of Onceler's business

- **Pg. 56: UNLESS**
  1. "Can you guys take a guess what the word, 'UNLESS' means?"
    - (Write the word "UNLESS" on the whiteboard and write down any ideas students have)
    - "Let's read on to find out!"
- **Pg. 58: Meaning of UNLESS is revealed**
  - The Onceler says "UNLESS someone like you cares a whole awful lot, nothing is going to get better. It's not."
    1. "What does the Onceler mean by the word, 'Unless'?"
    2. "Can one person make a difference? Can this boy? Can you??"
- **Pg. 60: Final page**
  1. "Why is it important that the Chosen Boy takes good care of the last Truffula seed?"
    - Key Points: he needs to regrow the truffula trees so the animals can return, the air can get cleaned up, and the land can become beautiful again!
  2. "Do you think you can take care of a seed like the Chosen Boy?"
    - **Pass out mustache seeds to every student**
  3. "Michaela is passing out seeds that you guys are now in charge of planting at your own home. Who likes butterflies?? These are milkweed seeds that give butterflies food and they help clean the air we breathe. "
  4. Plant this seed. Treat it with care. Give it clean water. And feed it fresh air. Then, if you all do a reallllllly good job and care for our little baby seeds every day you might be visited by butterflies!"

\*\*\*"Everyone stand up and stretch, deep breath of this clean Santa Barbara air!"\*\*\*

**Transition:** "Alright guys now we're going to ask you a few questions. Raise your Truffula trees high in the air if you think you know the answer!"

#### Discussion:

1. "Do you remember how we defined air pollution?"
  - "Exactly! It's simply anything in the air that is harmful for plants, humans, or animals."
2. "Besides factories, where else does air pollution come from?"
  - Key points: cars, trucks, boats, planes, campfires, forest fires
3. "Ok, so we now know all the different places that air pollution can come from. What are some ways we can put a stop to air pollution? Can you think of any?"

(Write their ideas on the board)

- Key Points: Walking/riding to school, Carpooling (define for them), riding the bus, taking the train, buying food from local sources, educating your friends. Planting seeds!

#### 4. "How does limiting air pollution make us healthier?"

- Key Points: Walking/riding a bike to school helps build big lungs, our lungs will be healthier, we won't get sick as often, we can spend more time outside or playing sports

#### Plant Activity:

- "Alright! I need everybody to hold up their truffula tree and face me! Excellent!"
- "Do you all remember why the Lorax and his friends left? Did they look healthy and happy without the truffula trees?"
- "You are exactly right! It is a pretty tough life when the air is not clean. And this is true in real life too. We need to remember to take care of the air around us"
- "Protecting trees and growing plants is a huge part of this!"
- "We have a special present for you all. We have this special pot with poppy seeds and the word "Unless" painted on it. Who here remembers what the Once-ler meant by that word?"
- "Exactly! so *unless* you all care for this plant a whole awful lot, it's not going to grow it's not. We are going to leave this seed in your hands and although Mrs. Ball will be in charge of it, it is your responsibility to remind her to take care of it!"
- "And remember, the seeds we gave to each of you earlier are your responsibility as well! When you take your seed home, have your parents help you plant it. It will be your job to help your parents make sure it grows!"
- "If you think you can handle this, hold up your truffula trees and on the count of three say "I speak for the trees!"
- "1, 2, 3, I speak for the trees! Awesome!"
- "Okay we are going to end by doing the Clean Air chant! Is everyone ready? Great!"

*When I say "Clean", you say "Air";*

*"Clean", "Air"; "Clean", "Air";*

*slap slap - clap clap - snap snap;*

*"Clean Air!!"*

Thank the class!