

## Conservation Teacher's Guide

Feel free to use this as a tool but change anything that is needed for your students in particular. Email any questions at [eschissler@oxy.edu](mailto:eschissler@oxy.edu) or under the feedback section under the tab "Resources."

### **Day 1 of Conservation**

#### Objectives

- Learn the basic definitions relating to conservation
- Learn about different types of conservation
- Understand why conservation is important
- Understand some threats to our environment

#### Material needed

- Conservation information guides - these guides include more information about each topic and help with answering questions
- Paper and writing material to take notes
- Recyclable and non-recyclable materials
- Worksheets found on the website (optional) - can be filled out during or after the lesson
- Videos found under educational videos on websites (Optional)

#### Recommendations

- Encourage students to take notes and draw during the lesson
- Encourage them to interject, tell them to feel free to tell stories
- Encourage kids to be curious and ask questions. If you don't know an answer to something, try to respond with something like, "let's look it up together."

#### Introduction

- Conservation is protecting the environment from harm and trying to maintain natural wildlife.
- There are many threats to our environment, and many of our natural resources are running out, such as forests, water, and food.
- As we discussed previously, many important animals are also endangered and could go extinct because of the lack of conservation.
- Starting question: Can anyone think of things that could be harmful to our environment?

#### Instruction (20 minutes)

- Lesson: What is Conservation?

- Conservation is the protection of things found in nature (Earth's natural resources such as water, soil, minerals, wildlife, and forests).
- If one part of this ecosystem is destroyed, everything else becomes unbalanced.
- One of the most important resources on earth is water. We need to be careful about not wasting water especially during long periods of drought where water is not available, and no crops will grow.
- Anyone can help by recycling paper, plastic, glass, and other materials. Recycling saves resources by reusing materials that would otherwise be thrown away.
  - Recyclable: papers, cardboard, empty juice and milk cartons, steel and aluminum cans, glass bottles and jars, plastic bottles, rigid plastic products
  - Non-recyclable - plastic bags, egg cartons, take out containers, drinking cups, soiled food items, broken glass items, plastic utensils, used/ greasy paper items, electronic waste, styrofoam, bubble wrap, oils, ceramics, etc.
- Some threats to our environment that we need to work against are hunting (loss of animals and wildlife), pollution (affects air quality, water quality, and life on earth), deforestation, overfishing, etc.
- Types of conservation
  - Habitat conservation - a land management practice that seeks to conserve, protect, and restore habitat areas for wild plants and animals.
  - Water conservation - reducing the use of water to protect the environment.
  - Marine conservation - the protection and preservation of ecosystems in oceans and seas.
- Activity: Scavenger hunt
  - Bring recyclable items and non-recyclable items and hide them in the area you plan on having the scavenger hunt.
    - Recyclable: papers (office papers, magazines, newspapers, junk mails, etc.), cardboard (ex: cereal/snack boxes), empty juice and milk cartons, steel and aluminum cans, glass bottles (clear green, and brown) and jars, plastic bottles, rigid plastic products
    - Non-recyclable - plastic bags, egg cartons, take-out containers, drinking cups, soiled food items, broken glass items (broken items in general), plastic utensils, used/ greasy paper items, and electronic waste, styrofoam, bubble wrap, oils, ceramics, etc.
  - Print out a checklist of items you are including and give it to the students
  - Give students time to search the area and then get together as a group.
  - Sort which items can be recycled and which can't be recycled, then throw away all the items in the respective bins.

## Conclusions

- Today we learned about conservation and why it is important.
- We also learned about threats to our environment.
- Does anyone have any last questions before we wrap up?
- Look forward to our next lesson on how you can help the environment!

## **Day 2 of Conservation**

### Objectives

- Learn about different types of ways kids can help in conserving the environment
- Understand why conservation is important
- Encourage kids to partake in activities that benefit the environment outside the classroom
- Increase awareness of the world around them

### Recommendations

- Encourage students to take notes and draw during the lesson
- Encourage them to interject, tell them to feel free to tell stories
- Encourage kids to be curious and ask questions. If you don't know an answer to something, try to respond with something like, "let's look it up together."

### Introduction

- We can do little things to save the environment besides spreading awareness and the previous methods we discussed in the Endangered Animals lesson, such as gardening your own food and saving water.
- Starting question: What are some ways we can help save the environment?

### Material needed

- Conservation information guides - these guides include more information about each topic and help with answering questions
- Paper and writing material to take notes
- Bird feeder materials are listed below under "Activity."
- Worksheets found on the website (optional) - can be filled out during or after the lesson
- Videos found under educational videos on websites (Optional)

### Instruction (20 minutes)

- Lesson: How you can help with conservation
  - Doing the activities mentioned previously in the Endangered Species unit (spreading education, volunteering, fundraising, etc).
  - Turn off the water when you are not using it to avoid wasting water.
  - Turn off lights when you leave a room to prevent excess energy from being used.
  - Try walking, biking, or public transportations rather than car rides as it saves energy.
  - Garden your own food!
  - Again, reuse materials and recycle..
- Activity: Make a Bird Feeder

- To help with conservation, we will be helping feed the natural species nearby us by making a bird feeder so the birds can get more nutrients and energy.
- Bird feeder instructions
  - Get together the following ingredients: Black oil sunflower seeds or bird seed, cheerios, peanut butter, old toilet paper roll, string, plate.
  - Layout the paper plate and crush the cheerios. Then put the sunflower seeds or bird seeds on the plate and mix with the crushed cheerios.
  - Take the old toilet paper roll and cover the inside and outside in peanut butter. After rolling the paper in the crushed ingredients on the plate, make sure the toilet paper roll is covered in the ingredients. Put the ingredients on the inside of the toilet paper as well trying to get as many seeds and cheerios to stick to the inside of the roll.
  - Put the string through the toilet roll, so there is string on both openings. Tie the string ends together and make a knot.
  - Hang on a tree branch outside.

#### Conclusions - 5 min

- Today we learned about ways we can help conserve the environment every day such as turning the tap water off when not in use and making sure all the lights are off after you leave a room.
- Does anyone have any last questions before we wrap up?
- Look forward to the next unit where we continue to talk about some famous scientists and ways you can pursue science in the future.

If you want to learn more, please reference the supplemental and website document at the bottom of the “Curriculum” pages.

References will be under the references tab on the website.