

# **Environmental Science Careers: Classroom Lesson Plan**

#### **Lesson Topic:**

Identifying and Comparing Job Responsibilities in Environmental Science Careers

#### **Lesson Objective:**

Students will be able to describe job responsibilities for a variety of environmental science careers and reflect on the similarities and differences in these careers.

#### **Materials:**

- Copies of What Do Environmental Scientists Do All Day?
- Writing utensils
- Projector or other method to watch the video

### **Advanced Preparation:**

- Preview the video before sharing it with your students [4:46].
- Make copies of What Do Environmental Scientists Do All Day?

## Warm-up Activity:

1. Tell students that they will be learning more about the environment and careers they could pursue in the field of environmental science.



- 2. Ask, "What do I do every day when I come to school?"
- 3. Elicit student responses of the types of task a teacher is responsible for such as explaining new things, grading papers, helping students, etc.
- 4. Tell students that these tasks are your job responsibilities. Ask students to brainstorm job responsibilities of other common jobs such as doctor or cafeteria worker.
- Pass out What Do Environmental Scientists Do All Day? worksheets.

#### View the Video: "Environmental Science Careers"

- 1. Tell students they will be watching the video titled, "Environmental Science Careers" to learn about the different job responsibilities that these careers have.
- 2. Explain that the video presents role models talking about their careers in the field of environmental science and what makes them valuable or rewarding.
- 3. View the video together and have students listen for the role models to discuss their careers. Encourage students to note the careers that seem most interesting to them.
- 4. Direct students to complete the first column of the table on the What Do Environmental Scientists Do All Day? worksheet.
- 5. View the video again; this time, have students complete the second column on the **What Do Environmental Scientists Do All Day?** worksheet.
- 6. As needed, the video can be viewed a third time for students to check their work or allow students that need some additional time to complete their worksheet.



#### Video Follow-up:

- 1. Ask students to offer their questions, comments, reactions, and responses to the video.
- 2. Give students a few minutes to share about the careers they found most interesting with another student sitting near them.
- 3. Bring the class together to discuss some or all of the following questions:
  - What career did you find most interesting? Why?
  - How are all of these careers similar? Different?
  - What reasons did the role models give that their careers were rewarding? Did some role models give similar answers?
  - Do you think environmental science careers are important?
    Why or why not?
- 4. Direct students to complete the final question on their **What Do Environmental Scientists Do All Day?** worksheet.
- 5. Encourage students to continue researching the career they listed as most interesting and share their newfound interest with friends and family members.



#### **Extension Activities:**

- 1. Encourage students to continue exploring the careers that they found most interesting by making a brochure, creating a presentation, or writing a report. These final products should include additional information about the focus careers such as educational requirements, projected future outlook, salary, etc.
- 2. Use the "Related Questions to Explore" as discussion springboards or writing prompts to help students further explore the environment and environmental science careers.

#### Related Questions to Explore:

- What careers did you learn about that were new to you? Which careers had you previously heard of?
- What kind of people decide to pursue a career in environmental science? Why do you think that?
- Are you interested in an environmental science career? Why or why not?
- What might happen if there were no environmental scientists in the world?
- If you had to explain environmental science careers to a student in Kindergarten using one sentence, what would you say?



# What Do Environmental Scientists Do All Day?

Watch the video "Environmental Science Careers". Select the five careers that seemed most interesting to you and write them in the "career" column below. Then, as you watch the video a second time, write the job responsibilities of each career in the second column.

The careers discussed in the video are environmental advocate, environmental engineer, civil engineer, environmental geologist, ichthyologist, marine biologist, biological oceanographer, ice analyst, underwater robotics engineer, meteorologist, and park ranger.

Career	Job Responsibilities

Which	career	was the	most II	nterestir	ng to yo	u? Why	?	



# Ideas for Future Lessons/Activities Related to the Environment and Environmental Science Careers:

- Comparing and Contrasting Careers in Environmental Science: Salaries, Work Environments, Educational Requirements, and More!
- 2. Conducting and Recording Interviews about Environmental Science Careers with Real Life Inspiring Women
- 3. Real-Life Impacts: Researching Famous Environmental Scientists
- 4. What's Happening in Our World: Environmental Issues in the News
- 5. The EPA: What is the Environmental Protection Agency and What Do They Really Do?
- 6. Rules and Laws: What Is the Government Doing to Protect Our Environment?
- 7. What Can We Do to Help? Creating a Class Environmental Science Project