

Science Careers: Classroom Lesson Plan

Lesson Topic:

Exploring Careers in the Sciences

Lesson Objective:

Students will be able to discuss the benefits of preparing for a career in the sciences.

Materials:

- Copies of List of Role Model Science Careers
- Projector or other method to watch the movie

Advanced Preparation:

- Preview the video before sharing it with your students [1:26].
- Make copies of List of Role Model Science Careers.

Warm-up Activity:

- 1. Provide each student with a copy of the List of Role Model Science Careers.
- 2. Have students circle the science careers they are familiar with and research the rest. Have students note any new information they learned about any of the careers listed.
- 3. After completing their research, have students work together and/or with you to write what each scientist does when on the job in their own words on the List of Role Model Science Careers.



4. Use this opportunity to clarify or clear up any misconceptions regarding the career labels.

View the Video: "Science Careers"

- 1. Tell students they will be watching the video titled, "Science Careers".
- 2. Explain that the video presents role models talking about why a career in science is very desirable and fulfilling.
- 3. Tell students that as they view the video, they should listen for reasons the scientist role models encourage others to become scientists. Then, view the video together.
- 4. View the video again; this time, invite students to formulate questions or comments about the ideas discussed in the video and to be prepared to discuss these after viewing the video.

Video Follow-up:

- 1. Ask students to offer their questions, comments, reactions and responses to the video.
- 2. Invite students to note specific things they learned about the different science careers featured in the video and to reflect upon their observations (e.g., "I liked knowing that a career in science can lead to many other career opportunities.").
- 3. Ask students to go back to their **List of Role Model Science Careers** and add information next to each career about why that role model thinks science is a career that girls should consider pursuing. Replay the video one more time as needed.
- 4. Have students tell about the types of science careers they think they might enjoy learning more about and why.



Extension Activities:

- 1. Use the "Related Questions to Explore" as discussion springboards or writing prompts to help students further explore careers in the sciences.
- 2. Invite students to use the Career Girls website to "meet" over 50 women scientists talking about their careers in science.
- 3. Have students use books, magazines, and/or the internet to discover other science careers not featured in the video. After compiling a list of these science careers, have students select one and prepare a brief report about that career. Consider having the reports consist of the career title, career description, typical salary range, and employment prospects.

Related Questions to Explore:

- What do you think the first scientist in the video meant when she said that "science is knowledge"? Explain why you agree or disagree with this.
- The second speaker said that science gives us an "opportunity to explain life's wonders." What life wonders would you want to discover using science?
- What is meant by "perspective"? How might girls bring a different perspective to scientific efforts? Explain your answer.
- What is "educational empowerment"? How does a career in science provide educational empowerment?
- How might creativity play a part in medical and scientific breakthroughs?
- What are some ways a career in science might help you develop confidence and persistence?
- What are some ways you could change your community by working in a science career?



List of Role Model Science Careers in the Video:

Epidemiologist
Medical Writer
Microbiologist
Mars Rover Systems Engineer
Scientist Sequencing DNA
Immunologist
Organic Chemist
Molecular Biologist



Ideas for Future Lessons/Activities Related to Careers in the Sciences:

- 1. What Do Scientists Do? Exploring Careers Paths in the Sciences
- 2. Practice Being a Scientist: Solving Real Life Science Problems
- 3. Science in the News: What Problems Have Scientists Solved this Year? What New Things Have They Discovered?
- 4. Science Over Time: From Aristotle to Today
- 5. The Products of Science Are all Around Us: Listing Items We Use Daily That Were Created by Scientists
- 6. Literature-Based Learning: Exploring Biographies and Memoirs of Famous Scientists
- 7. Technology in Science: How Has Technology Revolutionized the Sciences?