

Lesson Title: Exploring the Various Types of Scientists

Lesson Summary:

- This lesson provides students with an opportunity to expand a classroom discussion beyond the general concepts of what a scientist is and what a scientist does by exploring the various types of scientific occupations and learning about the responsibilities of each.

Time Frame:

- One or two 40 minute class periods

Grade Level:

- This lesson was created for 6th graders, but could be modified for any grade level.

Materials:

- Types of scientists research page (provided)
- Exploring types of scientists poster requirements (provided)
- List of different types of scientists (Website provided)
- Poster Rubric (provided)
- Pieces of paper with different types of scientist written on them
- Plastic container (to hold scientist names)
- Camera
- Crayons or colored pencils
- Old magazines
- Computers
- White copy paper

Resources

List of scientific occupations with definitions

- <http://phrontistery.info/sciences.html>
This website gives an excellent variety of scientific occupations. It is a good idea to go through and pick the occupations that are most appropriate for your content area and grade level.

State Standards:

- **Language Arts**

5.A.3a Identify appropriate resources to solve problems or answer questions through research.

- **Science**

13.B.3c Describe how occupations use scientific and technological knowledge and skills.

Objectives:

Students should be able to:

1. Articulate the difference in meaning between words ending with the suffix –logy and –ist.
2. Find reliable and valid resources to conduct research about his or her assigned scientist.
3. Use the correct adjectives and verbs to describe a specific scientific occupation.

Prep Work:

- Copy all the notes and research pages for each student
- Cut up pieces of paper with scientist names on them
- Take picture of each student and print them out on a color printer

Teacher Lesson Procedures:

1. To start a classroom discussion I would suggest asking the following questions:
 - What is a scientist?
 - What does a scientist look like?
 - What does a scientist do?

This can start some great discussions about scientists and reveal stereotypes that students have about scientists.

2. After a classroom discussion has concluded, pass out the “Student example page” (-logy versus -ist notes are top half).
3. Discuss briefly the meaning of words that end with the suffix “-logy” versus words ending with the suffix “-ist”
4. As a class, fill out the “Exploring Types of Scientist” example (bottom half of student page) with the example of an archeologist. It is important to make sure that each student understands the tasks that he or she is going to be asked to complete as a homework assignment or in class activity.
5. Pass out “Exploring Types of Scientist Poster Requirements and Rubric” page and thoroughly explain the expectations of the assignment.

6. Have each student draw one type of scientist from list that was cut out prior to this lesson. The scientist that he or she draws will be the topic of their research and presentation.
7. Assign the “Exploring Scientist Research Page” for homework. If you student population does not have access to computers at home I would suggest completing this as an in-class activity.
8. The next class period take a picture of each student as they walk through your door. This picture will be pasted on to the poster.
9. Pass out a piece of white copy paper with a stapled rubric on the back. This paper will be used create his or her scientific poster.
10. Give the students time to create their poster and write their descriptive sentences.
11. Print out the pictures of each student and give them a copy. Ask them to cut around their head and paste it to the body of their created scientist.
12. Once all the posters are finished ask every student to present their newly researched scientist to the class and hang their poster up around the room.

Modifications or Accelerations

- For my ELL students the ELL teacher and I decided that each of the students would create a poster with the various scientific equipment and actions that would contain pictures with English words and Spanish translations.
- To challenge of a few of my students, I had them research a famous scientist within their branch of study.