

Science Giants

Purpose

Students will explain that doing science involves many different kinds of work and engages men, women, and children of all ages and backgrounds.

Materials

For the teacher: chart paper, marker, chalk, chalkboard

For each student: research materials on male and female scientists, poster board, markers, copies of Black Line Masters (BLMs) *Science Giants* and *Science Giants II*

Activity

A. Pre-Activity Preparation

List the following questions on chart paper:

- What is the name of the scientist you just learned about?
- Is this scientist male or female?
- What did this scientist study?
- List the scientist's birth and death dates.
- Where did the scientist live?

B. Pre-Activity Discussion

1. Ask students: "What is science? What is a scientist?"
2. Tell students to think of types of scientists or names of scientists they have heard of before. List student responses on the chalkboard.
3. Discuss how people who study science study many different things. Explain that anyone can be a scientist if he/she has a question and works to find answers and evidence for the answers.

C. Project Description

1. Explain to students that they will research a scientist and the scientist's profession. Explain that you will provide a list of possible scientists to research; however, they may research a scientist who is not on the list.
2. Tell students that they will be expected to present their findings to the class in a one page paper and presentation (e.g., poster, collage, etc.).

(continued)



INCORPORATING **TECHNOLOGY**

Have students research different kinds of scientists on the Internet at Web sites, such as www.niehs.nih.gov/kids/labcoat.htm.



EXTENDING THE **ACTIVITY**

Invite a scientist to your class to discuss his/her profession or arrange a visit to a place where people study a field of science (e.g., veterinarian's office, chemistry lab, pharmacy, or factory).

Standards Link
5.1.5

Activity (continued)

3. Distribute copies of the BLMs *Science Giants* and *Science Giants II* to each student.
4. Provide students with time to research in the library. Allow ample time for students to complete their research, write their papers, and prepare their presentations.





D. Project Presentation

1. When you are ready to begin student presentations, post the chart paper you prepared ahead of time. Tell students that they will be expected to answer these five questions after each presentation.
2. Have each student present his/her material. Remind students to record information during each presentation.
3. After all of the presentations have been given, ask students to review the answers they recorded.
4. Direct them to count the number of countries lived in by all of the scientists. Tell students that scientists come from countless different cultural backgrounds.
5. Ask students: "Did all of the scientists researched study the same thing?" Discuss with them that scientists do all kinds of work.
6. Ask students: "Did all of the scientists live at the same time?" Talk about how science has been done for many years, by people of varying ages.
7. Discuss how doing science involves many different kinds of work and engages people of all ages and backgrounds.

Questions for Review

Basic Concepts and Processes

Ask the following questions during the activity:

-  Who can be a scientist?
 -  Can children be scientists?
 -  How do you know that science involves people of all ages and backgrounds?
 -  Did you have any difficulties performing your research?
-

Name: _____

Science Giants

Directions: Choose a scientist to research. Include the following information in your one page paper:

- 1. Name of scientist**
- 2. Type of scientist**
- 3. Male or Female**
- 4. What the scientist studies/studied**
- 5. Birth and death dates**
- 6. Where he/she lived**
- 7. Why you chose this scientist**
- 8. The most interesting fact about your scientist**
- 9. What makes your scientist important to the world**

***You will also prepare a presentation on your scientist. Include everything from your paper in your presentation.**

Science Giants

Teacher Directions

Distribute copies of the BLM *Science Giants*, read through the directions with students, and answer any questions.

Give students the following suggestions for their presentations:

- Present the information in pictures on a poster board.
- Make a collage of things the scientist has done.
- Pretend you are the scientist you researched. Dress as he/she would, and talk about your life.

Provide students with time to go to the library and do research. When each student has completed his/her paper and visual aid, have students give their presentations to the class.

Answer Key

Answers will vary. Make sure students answer all of the questions on the BLM in their papers and presentations.

Name: _____

Science Giants II

You could begin looking for a scientist by researching a certain type of scientist, or you could begin by researching a specific scientist. Here is a list of types of scientists and actual scientists to get you started.

Different Types of Scientists

Anthropologist
Archaeologist
Astronomer
Biologist
Botanist
Cardiologist
Chemist
Computer Scientist
Dentist
Ecologist
Economist
Engineer
Entomologist
Food Scientist
Geneticist
Geographer
Geologist
Historian
Kinesiologist
Limnologist
Marine Biologist
Mathematician
Meteorologist
Mineralogist
Nurse
Optician
Ornithologist
Paleontologist
Pediatrician
Physicist
Podiatrist
Primatologist
Psychologist
Radiologist
Veterinarian
Virologist
Zoologist

Female Scientists

Elizabeth Blackwell
Rachel Carson
Marie Curie
Rosalind Franklin
Jane Goodall
Mary Styles Harris
Mary Leakey
Lise Meitner
Florence Nightingale
Sally Ride
Jeanne Villepreux
Madam C.J. Walker

Male Scientists

George Washington Carver
Francis Crick
Pierre Curie
Charles Darwin
Albert Einstein
Galileo Galilei
Camillo Golgi
Harry Hess
Robert Hooke
Gregor Mendel
Albert Michelson
Isaac Newton
Alfred Nobel
James Parkinson
Louis Pasteur
Ivan Pavlov
Nikola Tesla
James Watson

Science Giants II

Teacher Directions

Distribute copies of the BLM *Science Giants II* along with the BLM *Science Giants*.
Tell students to use the BLM *Science Giants II* to help them begin their research.

Answer Key

Not applicable.