

South Carolina Academic/Career Development Integration Activity

Title **Inventors and Scientists (ESS-4)**
Subject **Social Studies**

Grade Level(s) 5

SC Content Standard – United State Studies 1865 to the Present: Standard 5-3. The student will demonstrate an understanding of major domestic and foreign developments that contributed to the United States' becoming a world power.

5-3.2. Identify prominent inventors and scientists of the period and summarize their inventions or discoveries, including Thomas Edison, Alexander Graham Bell, the Wright Brothers, and Albert Einstein. (H)

National Career Development Guidelines Goal/Indicator

Career Management GOAL CM3. Use accurate, current, and unbiased career information during career planning and management.

Indicator CM3.K5. Identify occupations you might consider without regard to your gender, race, culture, or ability.

Career Development Objectives

1. The student will research one of the prominent inventors and scientists of the period and summarize his/her inventions or discoveries.
2. The student will identify occupations in today's economy that resulted from the invention or discovery.
3. The student will identify an occupation he/she finds interesting.

Assessment

1. The student will write a short research report about one of the prominent inventors and scientists of the period and summarize his/her inventions or discoveries.
2. The student will identify at least 10 occupations found in today's economy that resulted from the invention or discovery.
3. The student will identify one occupation he/she finds interesting.

Preparation

- Prior Learning—Unit on inventors and scientists
- Handouts/Worksheets—*Inventors and Scientists Worksheet*
- Resources/Materials—Writing materials, textbook, other resource books, and the Internet (Note: Consider expanding the list to include women and minority inventories and scientists..visit www.ala.org and see *Inventors, Inventions, and Innovations* for some ideas, also see attached *A Sampler of American Women Inventors and Scientists*
- Time Required—60-120 minutes for activity, plus discussion time and homework

Procedures

Part One (60 -120 minutes over several days)

- In this activity, students will research one of the prominent inventors and scientists of the period and summarize his/her inventions or discoveries. This activity takes place over several days.
- Begin by engaging students in a quick review of the prominent inventors and scientists of the period including Thomas Edison, Alexander Graham Bell, the Wright Brothers, and Albert Einstein. (Note: Consider expanding the list to include women and minority inventors and scientists.)
- Tell students they are to write a short report about one of the inventors or scientists.
- Have each student select an inventor or scientist (or you might make assignments).
- Hand out the *Inventors and Scientist Worksheet* and review it with the students. Students are to use the worksheet as a guide to writing their reports.
- Review research resources. Give students time in class to complete the worksheet and their research.
- Have students write the report as homework.
- Optional: Create an *Inventors and Scientists* notebook with all of the students' reports.

Part Two - Career Development Connections

- Introduce the idea that many of today's careers can trace their roots to inventions and scientific discoveries.
- Explore with students some of the careers identified in their reports.
- Continue the discussion by inviting students to share some of the careers in today's workplace they find interesting.
- Wrap up by pointing out to students that there are over 12,000 different careers. With changes in technology and the economy, new ones emerge and some disappear. During their school years, students will have many opportunities to explore careers. It is important for them to know about many careers, so they can make a good choice about what kind of work they want to do.

Crosswalks

SC Career Guidance Standard/Competency

Learning to Work Standard 1. Students will understand the relationships among personal qualities, education and training, and the world of work.

Competency 1.1. Explore career interests and related occupations.

Key Employability Skills

Basic Skills—Writing

Thinking Skills—Creative Thinking

Information Management—Acquires, interprets, and communicates information

Inventors and Scientists Worksheet

Name: _____

Date: _____

Directions: Gather information about an inventor or scientist. Complete the worksheet before you write your report. Write the title and author for each source you use. Follow the worksheet outline when you write your report.

1. Introduce your inventor or scientist.

Name _____

When lived (dates) _____

Where lived _____

2. Summarize inventions or discoveries

3. How did the inventions or discoveries contribute to the nation's economy (what new industries resulted)?

4. List ten careers that were created because of the inventions or discoveries.

5. List three careers of interest to you.

Resources

Source Title

Author

Source Title

Author

Source Title

Author

A Sampler of Women Scientists and Inventors

Elizabeth "Bessie" Coleman (1892-1926)

Miranda Stuart (1795-1865)

Rachel Carson (1907-1964)

Chen-Shiang Wu (1912-1997)

Gertrude B. Elion (1918-1999)

Jewel Plummer Cobb (1924-present)

Evelyn Boyd Granville (1924-present)

Mattie Knight

Amelia Bloomer