Lesson Synopsis

Elijah McCoy was an African-American inventor who successfully designed an automatic oil cup that may have inspired the popular phrase, "the real McCoy."

Grade Levels

Grades 4-6

Economic Concepts

- productivity
- patents

Content Standards and Benchmarks

Economics: increasing productivity, patent

Language Arts: comprehension, writing paragraphs

Materials

- writing materials
- drawing paper

Time Required

Procedure

Pre-reading:

1. Discuss:

   a. Have you ever heard the expression, "It's the real McCoy"?
   b. What do you think this expression might mean?

2. Explain that the book, The Real McCoy, tells how the expression started and what it means.

Reading

3. Read The Real McCoy to the class or assign the book to be read independently.
Post Reading

4. Discuss:

a. What was an oilman/fireman's job? (to shovel coal in the firebox and oil parts of the train)
b. How did oilmen oil train parts? (Every few miles, the train stopped and the oilman walked the length of the train oiling axles, bearings, and other moving parts.)
c. What did Elijah McCoy invent? (an oil cup that automatically dripped oil where it was needed)
d. Why was this an improvement? (The train didn't have to stop every few miles and the oilman could spend time doing other things.)
e. How did Elijah McCoy protect his rights to his inventions? (He applied for a patent.)
f. Why do you think McCoy wanted a patent? (to prevent others from copying his invention and benefiting from his idea and talent)

5. Explain that a patent is an official document issued by the U.S. government granting the exclusive right to an invention. People may also acquire a trademark for product names and logos to prevent others from using them.

6. Discuss:

a. Why did engineers ask for "the real McCoy"? (Even though some tried to imitate McCoy's cup, the imitations didn't work as well. The engineers could tell the difference.)
b. What does the expression "the real McCoy" mean? (the best, the genuine article)

7. Emphasize the importance of the oil cup by explaining that the oil cup helped to increase the productivity of the trains. Increasing productivity means producing more using the same or less amount of labor. The trains could travel from one place to another in less time because they didn't have to stop so often. Oilmen could spend their time doing other things.

8. Explain that McCoy developed solutions to problems he saw in his everyday life. Reinforce this idea by discussing his other inventions: an ironing table, lawn sprinkler, and a better rubber heel.

Closure and Assessment

9. Ask students to brainstorm common problems they or their families have which could be solved with some type of simple invention. List problems on the board, such as keeping track of remote controls, pencils, pens, keys; not having paper and pencil near the phone for messages; and watering houseplants while on vacation.

10. Ask students to choose a problem from the board and think of a simple invention to solve the problem. Instruct them to draw their invention and then write a paragraph describing how it works to solve the problem and increase productivity.

Optional Activity

11. Assign other expressions for students to research: the whole ball of wax, the cat's pajamas, mad as a hatter, sly as a fox, and smart as a whip.

Optional Activity
12. People often use brand names to describe a category of products. For example, we ask for a "Coke" even though we may really mean any cola drink. Ask students to make a list of other examples. (We call all cotton swabs "Q-tips," all copy machines "Xerox" all tissues "Kleenex." ) Create a bulletin board to illustrate the difference between generic terms and brand names.

K-5 Lessons
6-12 Lessons