

Lesson 2 Case Study with Primary Sources

Big Ideas

- Henry Ford used his love of tinkering, his persistence, his willingness to take risks and his ability to build good teams to create the Model T.
- We all have qualities that can help us be an innovator.

Key Concepts

- Curious
- Took advantage of opportunities to learn
- Mechanically inclined
- Perseverance after failure
- Willing to take risks
- Able to identify and attract outstanding people

Digitized Artifacts From the Collections of **The Henry Ford**

Lesson 2 Case Study with Primary Sources

- [Westinghouse Portable Steam Engine No. 345, Made circa 1881 and Used by Henry Ford](#) ID# THF74884
- [Henry Ford with Other Employees at Edison Illuminating Company Plant, circa 1895](#) ID# THF22975
- [Ford Quadricycle, 1896, First Car Built by Henry Ford](#) ID# THF3854
- [Detroit Automobile Company Delivery Truck Outside the Factory, 1899-1900](#) ID# THF25005
- [Henry Ford and Ed \(Spider\) Huff Driving the Ford Sweepstakes Racer at Grosse Pointe, Michigan, October 10, 1901](#) ID# THF23800
- [Ford Race Car “Sweepstakes,” 1901](#) ID# THF70565

- [Henry Ford and Ford Motor Company Executives at Henry Ford Museum, 1933](#) ID# THF22279
- [Ford Model T Touring Car, 1914, Given to John Burroughs by Henry Ford](#) ID# THF70573
- [Henry Ford with the First Ford V-8 Engine, March 26, 1932](#) ID# THF22218

Materials

- Computers with access to the Internet (preferred)
OR printed handouts of digitized artifacts’ images and descriptions
- Sign: How do people solve problems?
- Student Activity Sheet 2A:
Artifacts Tell About Us
- Answer Key 2A:
Artifacts Tell About Us
- Student Activity Sheet 2B:
Henry Ford: Biography of an Innovator
- Answer Key 2B:
Digitized Primary Sources for
Henry Ford: Biography of an Innovator
- Student Activity Sheet 2C:
Primary Sources Tell About Henry Ford
- Answer Key 2C:
Primary Sources Tell About Henry Ford

Duration 1 class period (45 minutes)

Continued...

Lesson 2 Case Study with Primary Sources Continued

Instructional Sequence

1 Engagement

Show students an object you have with you or on your desk, such as a watch, teacher ID, photograph, etc. Ask students to identify it and say why they you think you have it. Tell students that the tangible things that we own and use often reveal something about who we are. Remind students that artifacts are one type of primary source.

Ask them to choose a physical object they currently have with them, such as something they're wearing, something in their desk or backpack, etc. Pair the students up to discuss their objects using Student Activity Sheet 2A: Artifacts Tell About Us. Tell them not to answer the last question yet.

2 Henry Ford's Characteristics

Tell students that there are many artifacts associated with the life of Henry Ford, some of which are in the museum he founded.

In this activity, students in pairs or in groups of three will match digitized primary sources such as photographs, letters and artifacts with stories of Henry Ford's life. Students will read Student Activity Sheet 2B, a biography of Henry Ford that includes blanks where primary sources can illustrate a specific characteristic or story from Ford's life. They will choose which digitized primary source best fills the blanks. Students can view the digitized artifacts at [Lesson 2: Case Study with Primary Sources](#). If you do not have Internet access, print and copy the digitized primary sources and the accompanying descriptive information.

There are multiple ways to implement this activity. Choose or adapt the ideas below to meet your students' needs:

Literacy focus

Prepare for this activity by identifying and defining words in the biography of Henry Ford that may be challenging for your students. Assign one digitized primary source to each group. Distribute the story of Henry Ford's life, and

read it out loud for students. At the blanks where a digitized primary source is needed, stop and ask students to consider if their primary source fits here. Read through the whole story once before you ask the students where they think their primary source fits. As a group, discuss the story (perhaps with students summarizing it or reading it out loud again), what each image is about and what the image tells about Henry Ford's qualities. Refer to the descriptions to learn more about these digitized primary sources.

Primary source focus

Prepare by cutting the biography into one-paragraph sections. Provide, or have students look up, the definitions for difficult words as needed. Assign a paragraph to each group. Give them access to all the digitized primary sources from [Lesson 2: Case Study with Primary Sources](#). Students should read their paragraph and then choose the most relevant digitized primary source that illustrates their blank correctly.

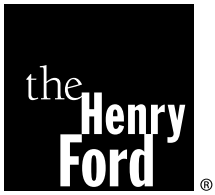
For either method, once students have made their initial primary source selection, review their choices and reasons with the whole class. Come to a consensus, using the answer key as a guide. Distribute the full biography to all students so that they may enter the digitized primary source into the correct blanks.

3 Students' Characteristics

Ask students to try to answer the last question on Student Activity Sheet 2A: Artifacts Tell About Us. Have them share their neighbor's object and the characteristic they think it represents with the whole class.

Assessment

Have each student complete Student Activity Sheet 2C: Primary Sources Tell About Henry Ford. Assess students on how well they understood and retained the earlier discussion, giving them extra credit for creativity and close examination of the artifact. Assess students' participation for Student Activity Sheet 2A: Artifacts Tell About Us.



artifacts Tell About Us

These are the types of questions historians ask when studying an artifact. Your answers will be the evidence that you use to figure out what this artifact tells you about your partner.

Name

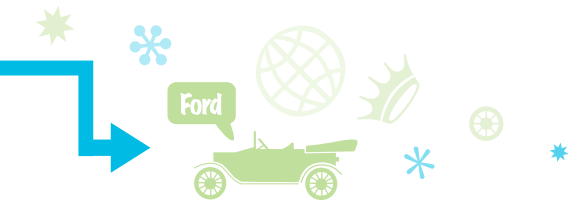
Partner's Name

What is the object called?

What is the object made of?

What is it used for?

Who uses it?



Is this object part of family life, education, work, play, home, religion, etc.?

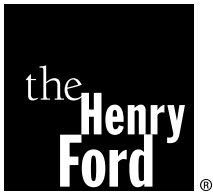
How did this object's owner obtain it?

What is it like to use this object?

What characteristics might a person using this object have? List a few ideas.

What does using this object say about your partner? What characteristics does he/she have?

Can this characteristic help your partner solve problems? How?



artifacts Tell About Us

These are the types of questions historians ask when studying an artifact. Your answers will be the evidence that you use to figure out what this artifact tells you about your partner.

What is the object called?

Eraser

What is the object made of?

Rubber

What is it used for?

Fixing mistakes

Who uses it?

Students, writers and many other people

Is this object part of family life, education, work, play, home, religion, etc.?

Education

How did this object's owner obtain it?

Bought it with beginning of year school supplies

Name

Partner's Name

What is it like to use this object?

Can be frustrating to have to use an eraser, but it can also feel good to be able to fix something you have written, especially when you know how.

What characteristics might a person using this object have? List a few ideas.

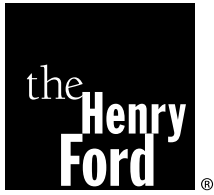
Smart, hard-working, persistent

What does using this object say about your partner? What characteristics does he/she have?

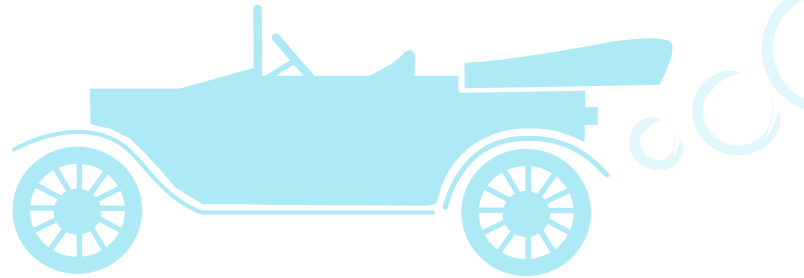
My partner will fix things as many times as necessary to get the right answer. He/she is persistent.

Can this characteristic help your partner solve problems? How?

He/she won't give up, even if it takes time to find the answer.

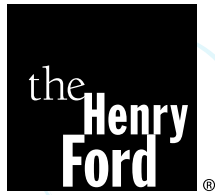


Henry Ford: Biography of an Innovator



Illustrate Henry Ford's biography by filling in blanks on the next page with artifacts from his life. Choose from the artifacts in the list below.

- A. Ford Model T Touring Car, 1914, Given to John Burroughs by Henry Ford ID# THF70573
- B. Ford Race Car "Sweepstakes," 1901 ID# THF70565
- C. Detroit Automobile Company Delivery Truck Outside the Factory, 1899-1900 ID# THF25005
- D. Ford Quadricycle, 1896, First Car Built by Henry Ford ID# THF3854
- E. Henry Ford with Other Employees at Edison Illuminating Company Plant, circa 1895 ID# THF22975
- F. Westinghouse Portable Steam Engine No. 345, Made circa 1881 and Used by Henry Ford ID# THF74884
- G. Henry Ford with the First Ford V-8 Engine, March 26, 1932 ID# THF22218
- H. Henry Ford and Ford Motor Company Executives at *Henry Ford Museum*, 1933 ID# THF22279
- I. Henry Ford and Ed (Spider) Huff Driving the Ford Sweepstakes Racer at Grosse Pointe, Michigan, October 10, 1901 ID# THF23800



Henry Ford: Biography of an Innovator



Name _____

By Bob Casey, Catherine Tuczec, Donna Braden
Curators, The Henry Ford

Henry Ford did not invent the automobile. He didn't even invent the assembly line. But his inexpensive Model T car and his improvements to production methods made him one of the major shapers of the 20th century. Why was he such an innovator?

Ford's beginnings were perfectly ordinary. He was born on his father's farm in what is now Dearborn, Michigan, on July 30, 1863. At a young age, Ford demonstrated some of the characteristics that would make him successful, powerful and famous. Using his mechanical ability, he organized other boys to build simple water wheels and steam engines. His curiosity led him to learn about full-sized steam engines by becoming friends with the men who ran them.

1. _____ He taught himself to fix watches and in doing so learned about machine design and about learning by trial and error. This way of learning fit his preference for learning by trial and error. These characteristics would become the foundation of his whole career.

Ford could have followed in his father's footsteps and become a farmer. But young Henry was fascinated by machines and was willing to take risks to pursue that fascination. In 1879, he left the farm to become an apprentice at the Michigan Car Company, a manufacturer of railroad cars in Detroit. Over the next two-and-one-half years, he held several similar jobs, sometimes moving when he thought he could learn

more somewhere else. He returned home in 1882 but did little farming. Instead, he operated and repaired portable steam engines used by farmers, occasionally worked in factories in Detroit, and cut and sold timber from 40 acres of his father's land. By now Ford was demonstrating another characteristic – a preference for working on his own rather than for somebody else. In 1888, Ford married Clara Bryant, and in 1891 they moved to Detroit where Henry had taken a job as night engineer for the Edison Illuminating Company.

2. _____ Ford did not know a great deal about electricity. He saw the job in part as an opportunity to learn. Also, Henry admired Thomas Edison, the great inventor, and was able to meet his role model through this job.

Henry was a good pupil and by 1896 had risen to chief engineer of the Illuminating Company. But he had other interests. He became one of the many curious and mechanically inclined people working in barns and small shops across the country trying to build horseless carriages. Ford completed his first automobile in 1896, **3.** _____ aided by a team of friends. A second car followed in 1898. Ford now demonstrated one of the key qualities to his future success – the ability to dream big and convince other people to sign on and help him achieve that dream. He persuaded a group of businessmen to back him in the biggest risk of

Continued...

his life – a company to make and sell horseless carriages.

4. _____ But Ford knew nothing about running a business, and learning by trial and error always involves failure. The new company failed, as did a second. To revive his fortunes, Ford took bigger risks, building and even driving racing cars. 5. _____ The success of these cars attracted additional financial backers, and on June 16, 1903, Henry incorporated his third automotive venture, Ford Motor Company.

The early history of Ford Motor Company illustrates one of Henry Ford's most important talents – an ability to identify and attract outstanding people. He hired a core of young, able men who believed in his vision and would make Ford Motor Company into one of the world's great industrial enterprises.

6. _____ The new company's first car, called the Model A, was followed by a variety of improved models. In 1907, Ford's four-cylinder, \$600 Model N became the best-selling car in the country. But by this time Ford had a bigger vision: a better, cheaper "motorcar for the great multitude." Working with a hand-picked group of employees, he came up with the Model T, introduced on October 1, 1908.

7. _____ Henry Ford was right; the Model T was truly a car for the multitude. Over 15 million were produced.

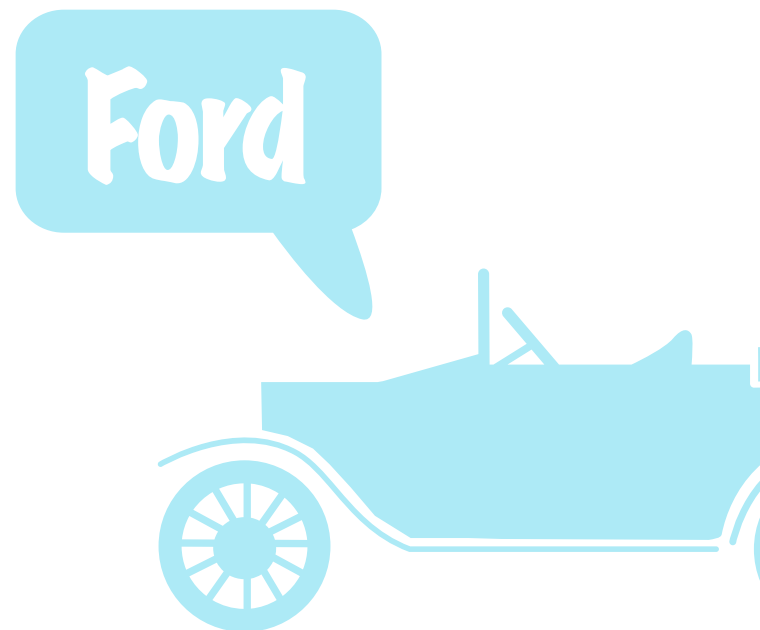
The Model T's success had convinced Henry that only he knew what car people wanted. He continued to believe that the Model T was that car. He ignored the growing popularity of more expensive but more stylish and comfortable cars like the Chevrolet and would not listen to his son Edsel and other Ford executives when they said it was time for a new model. Finally the declining sales figures convinced Henry to design a new car, called the Model A. It was successful, but for only

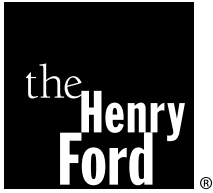
four years. In 1932 at age 69, Ford again showed his mechanical ability when he introduced his last great automotive innovation, the lightweight, inexpensive V-8 engine.

8. _____ Even this was not enough to halt his company's decline. By 1936, Ford Motor Company had fallen to third place in the U.S. market, behind both General Motors and Chrysler Corporation.

Henry continued to tinker, sometimes with his mentor and friend Thomas Edison. He also worked with George Washington Carver to try to find new uses for the soybean. Henry retired from Ford Motor Company in 1945 and died on April 7, 1947, at age 83.

Note The main sources for the above were *Ford: The Times, the Man, the Company, Ford: Expansion and Challenge 1915-1933* and *Ford: Decline and Rebirth 1933-1962* by Allan Nevins and Frank Ernest Hill; and *From the American System to Mass Production, 1800-1932* by David Hounshell.

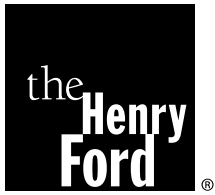




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primary sources Tell About

Even when the people aren't here to tell us their own stories, the photographs, letters and artifacts they leave behind reveal information about their lives.

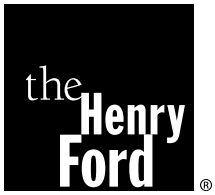
Name _____

1. What primary source are you using?

2. What story from Henry's life does this artifact tell us about?

3. Which of Henry Ford's characteristics does this artifact tell us about?

4. How do you think this characteristic helped Henry Ford solve problems?



Henry Ford

primary sources Tell About

Artifact

Westinghouse Portable Steam Engine No. 345, Made circa 1881 and Used by Henry Ford ID# THF74884

Story Learned about steam engines from men who ran them

Characteristic Curious

Artifact

Henry Ford with Other Employees at Edison Illuminating Company Plant, circa 1895 ID# THF22975

Story Took a job at Edison to learn about electricity

Characteristic Took advantage of opportunities to learn

Artifact

Ford Quadricycle, 1896, First Car Built by Henry Ford ID# THF3854

Story First car built by Henry Ford

Characteristic Mechanically inclined

Artifact

Detroit Automobile Company Delivery Truck Outside the Factory, 1899-1900 ID# THF25005

Story Henry Ford's first company, which failed

Characteristic Perseverance after failure

Artifact

Henry Ford and Ed (Spider) Huff Driving the Ford Sweepstakes Racer at Grosse Pointe, Michigan, October 10, 1901 ID# THF23800

Story Took great risk with automobile racing in order to win financial backers

Characteristic Willing to take risks

Artifact

Ford Race Car "Sweepstakes," 1901 ID# THF70565

Story Took great risk with automobile racing in order to win financial backers

Characteristic Willing to take risks

Artifact

Henry Ford and Ford Motor Company Executives at *Henry Ford Museum*, 1933 ID# THF22279

Story People who worked closely with Henry at Ford Motor Company

Characteristic Able to identify and attract outstanding people

Artifact

Ford Model T Touring Car, 1914, Given to John Burroughs by Henry Ford. ID# THF70573

Story The result of Henry Ford's vision of a car for the multitude

Characteristic Visionary

Artifact

Henry Ford with the First Ford V-8 Engine, March 26, 1932 ID# THF22218

Story Henry Ford's last great innovation, the V-8 engine

Characteristic Mechanically inclined