

# You Can Be an Innovator ... Like Henry Ford

## Unit Plan Overview

Upper Elementary School

### Overarching Question

How do people solve problems?

Introduce the overarching question by posting the sign

— *How do people solve problems?* —  
in a prominent place in the classroom so that it can be referenced throughout the unit.

### Key Concepts

- Model T
- Life at the turn of the 20th century
- Vision
- Innovation
- Collaboration
- Curious
- Took advantage of opportunities to learn
- Mechanical inclined
- Perseverance after failure
- Willing to take risks
- Able to identify and attract outstanding people
- Iron ore
- Lumber
- Human resources
- Production

### Key Concepts Continued

- Moving assembly line
- Division of labor
- Specialization
- Wage
- Union
- Consumption
- Car culture
- Unintended consequences
- Opportunity to innovate

### Lessons and Big Ideas

#### Lesson 1 Henry Ford and the Beginnings of the Auto Industry

- An innovation is an invention, an idea or an improvement or change that is used by many people.
- Henry Ford had a vision to produce a car for the masses.

#### Lesson 2

##### Case Study with Primary Sources

- 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.

#### Lesson 3 Resources and Location

- Henry Ford used natural resources from Michigan and other places in the United States and the world to build his Model T.
- Henry Ford had to solve the problem of where to locate his factory; Detroit was the answer.

#### Lesson 4 Using Human Resources on the Assembly Line

- To be a successful innovator, Henry Ford determined new ways to use labor – another resource.
- However, there were some unintended consequences of this innovation.

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**Tip** For Connections to National and Michigan Standards and Expectations, see the Teacher Guide.

## Unit Plan Overview Continued

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### Lesson 5 Impacts of Henry Ford's Solution Today – And Tomorrow

- The Model T was a successful innovation that has changed people's lives in many ways, intentionally and unintentionally.
- Automobiles present us with many further opportunities for innovation.

**Duration** 10 class periods (45 minutes each)

- **Lesson Plans** 6 class periods
- **Unit Project** 4 class periods

### Field Trips

- *Greenfield Village*
- *Henry Ford Museum*
- *Ford Rouge Factory Tour*

### Assessment

- Performance assessments included with each lesson plan
- Culminating projects (see Supplemental Resources)
- Review/assessment questions (see Supplemental Resources)

### Digitized Artifacts from the Collections of **The Henry Ford**:

#### Lesson 1 Henry Ford and the Beginnings of the Auto Industry

- “Wabash Avenue, North from Adams Street, Chicago,” 1900 ID# THF429
- Hay Wagon Coming Up from a Meadow, Flushing, New York, circa 1900 ID# THF38312
- Detroit Automobile Company Delivery Truck Outside the Factory, 1899-1900 ID# THF25005
- Duryea Motor Wagon with Barnum & Bailey Circus, 1896 ID# THF3979
- First Official Ford Motor Company Portrait of Henry Ford, 1904 ID# THF36449
- Ford Model T Touring Car, 1914, Given to John Burroughs by Henry Ford ID# THF70573
- Toyota Prius Automobile, 2002 ID# THF68248
- Westinghouse Portable Steam Engine No. 345, Made circa 1881 and Used by Henry Ford ID# THF74884
- Ford Quadricycle, 1896, First Car Built by Henry Ford ID# THF3854
- Bagley Avenue Workshop, Replica of Henry Ford's Workshop, in *Greenfield Village* ID# THF1840

#### 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

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## Unit Plan Overview Continued

Upper Elementary School

### Lesson 3

#### Resources and Location

- Exploded Ford Model T in *Henry Ford Museum* (view 1 ID# THF52709) (view 2 ID# THF52714) (view 3 ID# THF52715) (view 4 ID# THF52721)
- *Aerial View of Ford Rouge Plant Complex, 1948* ID# THF24040

### Lesson 4

#### Using Human Resources on the Assembly Line

- *Women Workers Assembling Magnetos at Ford Highland Park Plant, circa 1913* ID# THF23810
- *Workers Assembling Car Bodies at Ford Rouge Plant, 1932* ID# THF23466
- *1924 Ford Model T Cars on Assembly Line at Highland Park Plant, October 1923* ID# THF23577
- *Swift & Company's Meatpacking House, Chicago, Illinois, Splitting Backbones and Final Inspection of Hogs, 1910-1915* ID# THF32081

### Materials

- Computers with access to the Internet, digital projector and screen (preferred) OR printed handouts of digitized artifacts' images and descriptions
- Sign: How do people solve problems?
- Student Activity Sheet 1: My Innovation
- 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: 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
- United States map (classroom copy)
- World map (classroom copy)
- Student Activity Sheet 3: My Factory
- Scrap paper – lots
- Full roll of wrapping paper
- Empty wrapping paper tube
- Tape
- 10 feet of continuous flat surface, like desks or tables pushed together
- Student Activity Sheet 4: Henry Ford and the Moving Assembly Line
- Magazines – 1 for every 2 students
- Student Activity Sheet 5: The Automobile in My Life
- *You Can Be an Innovator ... Like Henry Ford*. Culminating Projects
- *You Can Be an Innovator ... Like Henry Ford*. Extension Activities
- Student Activity Sheet 6: *You Can Be an Innovator ... Like Henry Ford*. Review/Assessment Questions
- Answer Key 6: *You Can Be an Innovator ... Like Henry Ford*. Review/Assessment Questions

**HOW**  
do people solve  
**problems**

