

Goldie's HISTORY KITS



Industrial Revolution

TEACHER MANUAL

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WITH **PRIMARY**
SOURCES

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Instructions

What is a Goldie's History Kit?

This Goldie's History Kit is designed by the State Historical Society of Iowa for elementary-level educators to instruct on the Industrial Revolution. It includes the corresponding Read Iowa History lessons and educational components that have been tested and vetted as part of the State Historical Society of Iowa's Goldie's Kids Club that focus on literacy, visual literacy and Iowa history. There are detailed instruction to assist educators to incorporate these activities in a classroom. This kit also was developed to reflect the Iowa Core Social Studies and Literacy Standards. [Goldie's Kids Club](#) is a free program developed by the State Historical Society of Iowa to introduce children aged 12 and under to Iowa history – starting with Goldie, the eastern goldfinch, which is the state bird.

What's Included

Read Iowa History

- Structured lesson plans integrating primary sources and literacy skills

Read Aloud

- 4 books to read aloud to students
- Text-dependent questions

History Mystery

- Students investigate objects from the State Historical Museum of Iowa collection

Think Like... Cards

- Cards featuring prominent Iowans in history to integrate with lesson plans

Read Iowa History

Read Iowa History is a curriculum project that provides elementary-level educators with primary source lessons that are directly tied to key literacy skills and the [State Historical Society of Iowa's Primary Source Sets](#). These lessons provide structured lesson plans that integrate social studies and literacy with accompanying worksheets and hands-on activities to promote the use of primary sources at an elementary level.

Read Aloud

This Goldie's History Kit provides four books related to the Industrial Revolution. This read aloud activity combines literacy and Iowa history, and offers text-dependent questions to facilitate discussion around the book.

History Mystery

History Mystery is designed to challenge students to use their skills of deduction, observation and critical thinking to identify the multiple artifacts included in this activity. All objects are from the State Historical Museum of Iowa's collection, providing students with a unique opportunity to interact with museum artifacts from their own classrooms. Individual students or small groups will work as "history detectives" to figure out the nature of the object, its use and its relationship to the theme through the use of photographs and videos.

Think Like... Cards

The "Think Like..." activity includes a set of cards to encourage students to think about history through multiple perspectives. The cards include questions for students to use to guide their process of understanding the Industrial Revolution from different points of view. Every kit includes five universal cards (geographer, economist, journalist, economist and political scientist) and two additional ones related directly to the topic. Each card provides background information about a notable Iowan to provide a direct Iowa history connection.


Instructions

How To Use The Kit

This kit is designed to provide structured lessons and supplemental activities to educators with the freedom to decide what options are best for their classrooms and best fit into their curriculum. Educators are encouraged to first explore the manual and its four main elements (Read Iowa History, Read Aloud, History Mystery and Think Like... cards) to design a lesson for students that will fit their needs. Educators are welcome to alter any lesson plans, worksheets and assessments in the kit. Each of the four main sections include detailed instructions and suggested formats on how to use each section individually or interchangeably. Below are some suggested recommendations and tips to navigate the manual and activities.

Begin with Read Iowa History

The Read Iowa History lesson plans are structured and provide a more defined outline for integrating primary sources in the classroom. You can use the primary source lesson plans in the order provided, or however you see fit. Read Iowa History – as all four components – has background information, a materials list, easily reproducible worksheets and instructions to prepare your lesson.

 **Goldie's History Kit Connection:** There are Goldie icons in Read Iowa History to highlight connections that you could integrate with an activity from Read Aloud, History Mystery or the Think Like... cards activity.

Read Aloud, History Mystery & Think Like... Cards

These three components can be used as a separate lesson or you can integrate an element of an activity to Read Iowa History to provide more hands-on experience within the lesson. At the beginning of each of these sections in the manual, there are detailed introductions to highlight what is needed for that section (i.e. books are used for Read Aloud, photos and videos with History Mystery) and suggested formats to guide the sections. For Read Aloud, this includes additional information about the book and historical context. For History Mystery, this includes different formats to assist in the activity depending on time constraints and detailed information about each object, as well as a worksheet and questions to help students identify each object and its historical significance. Think Like... cards also provide instructions, and of the three, can be a much more flexible activity that can be integrated into a more structured lesson plan.

Additional Digital Access

Some elements of the kit will need to be digitally accessed. There is a USB flash drive in the kit box. It includes a digital version of this manual, worksheets, photographs and video for History Mystery and some optional supplemental materials. This content also is available on a [Google Drive folder](#), where materials can be downloaded.

Register for Free Goldie's History Kit [Merchandise](#)

Receive Goldie's History Kit merchandise by submitting your contact information to the [online form](#).

READ IOWA HISTORY

EDUCATOR MATERIALS

Industrial Revolution

LESSON PLAN FOR SUPPORTING QUESTION

**How did the Industrial Revolution
change the production of goods?**



4TH GRADE

Introduction to Read Iowa History

About Read Iowa History

Through the Library of Congress Teaching with Primary Sources grant, the State Historical Society of Iowa developed Read Iowa History — free, downloadable K-5 lesson plans to build and develop reading and critical thinking skills with primary sources in the classroom.


[Primary sources](#) (from the digital [Primary Source Sets collection](#)) are used to help students learn from multiple perspectives, develop primary source-based claims and evidence and to interpret documents and images of the past. These lessons were developed with the Iowa Core Social Studies and Literacy Standards. Each unit includes ready-to-use source material, worksheets, educator lesson plans and assessment tools and activities. You, the educator, are encouraged to explore the unit, and use materials as you see fit for your students. You are welcome to alter lesson plans, worksheets and assessments to best align with their curriculum.

Please check out the [Primary Source Sets toolkit](#) to learn more about using primary sources in the classroom.

What's Included

Educator Materials

Sources are accompanied by an educator lesson plan. This plan includes: the unit compelling question, unit supporting question, objectives, background information, vocabulary lists or cards, a materials list, instructions and Goldie's History Kit Connections (see below). There also is a "formative assessment" to wrap up each part of the unit and to check for comprehension. You are welcome to use the activities that are suggested or create your own.

 **Goldie's History Kit Connection:** A Kit Connection is designated with the Goldie icon, as seen on the left. This signals there is an opportunity in the Read Iowa History lesson plan to integrate another element of the kit. This could include a Think Like... card, a storybook or a History Mystery object.

Student Materials

Many of the unit instructions are accompanied by a worksheet that can be copied and distributed to students as they analyze the primary source(s) to assist in their application and comprehension. These worksheets are optional but may provide a structure for students to think critically about the primary sources they are analyzing. These student worksheets are available on the USB flash drive and in the [Google Drive folder](#) for easiest reproduction.

Formative Assessments, Lesson Summative Assessment and Scoring Options

The formative assessments, lesson summative assessment and possible scoring options allow you to evaluate how students comprehend and apply the knowledge they learned from the individual primary source activities. Assessment instructions, example worksheet(s) and possible scoring options are located at the end of this Read Iowa History section. Reproducible assessment worksheets also are available on the USB flash drive and [Google Drive folder](#).



Courtesy of State Historical Society of Iowa, "Washing Machine Assembly Line in Maytag Plant," 1949

Industrial Revolution

4th Grade

Overview

The Industrial Revolution marked a period of development in the latter half of the 18th century that transformed largely rural, agrarian societies in Europe and America into industrialized, urban ones. Goods that had once been crafted by hand started to be produced in mass quantities by machines in factories, thanks to the introduction of new machines and techniques in textiles, iron making and other industries. The positives and negatives of the Industrial Revolution are complex. On one hand, unsafe working conditions were widespread and pollution from coal and gas are still struggles of today. On the other, the move to cities and inventions that made clothing, communication and transportation more affordable and accessible to the masses changed the course of world history. Regardless of these questions, the Industrial Revolution had a transformative economic, social and cultural impact, and played an integral role in laying the foundations for modern society.



Unit Compelling Question

How does innovation impact people’s lives?



Unit Supporting Question

How did the Industrial Revolution change the production of goods?

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4th Grade

How to Apply Read Iowa History Lessons to Other Primary Sources

The origin of Read Iowa History lessons stem from the [Primary Source Sets](#), which are a collection of primary sources that focus on a topic and are structured under a compelling question and multiple supporting questions (typically three). Five or six primary sources are used to address and help students answer a single supporting question. Read Iowa History takes one supporting question, the primary sources addressing that question and instructions (divided into parts) to integrate these primary sources in the classroom through different activities.

These lessons, instructions, worksheets, tools and assessment suggestions can be applied to all of the [K-5 Primary Source Sets](#).



Unit Compelling Question

The compelling question drives students to discuss, inquire and investigate the topic of a unit of understanding.

How does innovation impact people's lives?



Unit Supporting Questions

Supporting questions scaffold instruction to help students answer the compelling question. Their aim is to stimulate thought, to provoke inquiry and spark more questions. The supporting question that is highlighted above is the question that was used in this Read Iowa History. The **bolded** question below is the supporting question for this Read Iowa History unit.

1) How did the Industrial Revolution change the production of goods?

2) How did the changes in communication and transportation affect people's lives?

3) What were the advantages and disadvantages of industrialization?



Read Iowa History: Industrial Revolution

This Read Iowa History lesson addresses "How does innovation impact people's lives?" and "How did the Industrial Revolution change the production of goods?" and includes lesson plans, worksheets, suggested assessments and other tools.

Standards and Objectives

Iowa Core Social Studies Standards

No.	Standard
SS.4.2.	Use supporting questions to help answer the compelling question in an inquiry.
SS.4.3.	Cite evidence that supports a response to supporting or compelling questions.
SS.4.4.	Construct responses to compelling questions using reasoning, examples, and relevant details.
SS.4.23.	Explain probable causes and effects of events and developments.
SS.4.24.	Develop a claim about the past and cite evidence to support it.
SS.4.25.	Analyze the impact of technological changes in Iowa, across time and place.

Iowa Core Literacy Standards

No.	Standard
RI.4.1	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
RI.4.2	Determine the main idea of a text and explain how it is supported by key details; summarize the text.
RI.4.3	Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.
RI.4.4	Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
W.4.1	Write opinion pieces on topics or texts, supporting a point of view with reasons and information. <ol style="list-style-type: none"> Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose. Provide reasons that are supported by facts and details. Link opinion and reasons using words and phrases Provide a concluding statement or section related to the opinion presented

Objectives

- I can explain probable causes and effects of the Industrialization Revolution.
- I can develop a claim about the past and cite evidence to support it.
- I can analyze sources, evaluate evidence and make a claim.
- I can cite evidence that supports a response to supporting or compelling questions.
- I can write an opinion essay with supporting evidence with accuracy, clarity, and relevant details.

Background Essay

Utilize this background essay, in whole or in parts, with students to provide further context and understanding about how the Industrial Revolution changed the production of goods. You can read it aloud to students, utilize excerpts and introduce the vocabulary words. The essay is also referenced in parts of this Read Iowa History to assist students in their interpretation and analysis of primary sources.

In the latter 1700s, inventions in the textile industry in Great Britain were the first signs of major changes in a **revolution in production** that greatly altered many aspects of society. Steam-powered machines began to do what animals or people had formerly done by hand. Textile mills could produce high quality cloth cheaply and in huge quantities. Factories sprang up, creating new jobs for factory workers but driving individual weavers who usually worked at home out of business and leading to the growth of cities. **Industrialization** spread to the iron industry, creating greater demands for mining of ore and coal. Soon the factory system spread to the rest of Europe and the United States. For their owners, factories could create great wealth. Workers, however, often toiled for long hours for low pay under harsh working conditions.

Industrialization of Agriculture

A tremendous growth of machine-power transformed agriculture in the 19th century. Using factory-produced machinery like the steel plow, the reaper, mowers and threshing machines powered by horses, farmers were able to expand the size of their operations and produce far more than they could when farming was done by hand. The invention of the cotton gin to separate seeds from the cotton fiber made cotton-growing profitable and increased the enslavement and abuse of people in southern states. Over the long term, it greatly reduced the number of people required to produce the nation's food and fiber. Around 1800, nearly 90 percent of Americans were farm families. Today, the number is under two percent. The growth of cities was a direct outcome of the **Industrial Revolution** as families left the farms to find work elsewhere.

Transportation, Electricity and More

By the mid-1800s, changes in transportation were making a big difference. Steam powered ships could travel much faster than those depending on the winds. Railroads were able to haul freight, mail and passengers long distances with greater convenience and reliability than horse-drawn vehicles. The invention of Morse code enabled rapid communication across great distances and helped draw the nation closer together. Telephones followed giving individuals the power to converse whenever they wanted regardless of whether they were together or not.

In the late 1800s, electricity began its **revolution** of the home and office. Light bulbs replaced smoky kerosene lamps, refrigerators replaced home deliveries of ice and electric washing machines and irons relieved some of the heavy drudgery of housework. At first, electricity was available only in towns because of the expense of stringing long lines through the countryside, but in 1936, Congress passed the Rural Electrification Act that helped to finance the creation of rural co-operatives to supply farm families with this advantage.

Beginning in the early 20th century, gasoline-powered engines led to the development of automobiles and tractors that further reduced our dependence on horses. Henry Ford built a factory that broke down the manufacture of an automobile into many small steps of an **assembly line** and allowed him to **mass produce** the Model-T that had a major impact on American life. Now a reliable automobile was available to the average family, providing a mobility undreamed of only a few generations earlier. Families were no longer bound to travel from town to town by rail but could drive where they wanted on short trips or even long family vacations. Farm children could attend high schools and other activities in town.

The invention of the computer, Internet and the entire digital industry is yet another stage of the **Industrial Revolution**, and one whose impact people are still experiencing. Who knows what another 20 years will bring?

Background Essay continued

Impact of the Industrial Revolution

With all the advantages of the **Industrial Revolution** that provides us with goods, services and opportunities unavailable to past generations, there are downsides, too. There is a much greater inequality in wealth, with some super-rich people while others live below the poverty level. Factories and **industrialization** make great demands on the environment for raw materials and often pollute the air by burning coal or the rivers with toxic dumps of toxic chemicals. Because Americans no longer produce (or even know how to produce) many of the items upon which they depend on, people are vulnerable to forces over which they have little control.

For the past 300 years, civilization has changed more than it had for thousands of years, and those changes are accelerating. What impact will those changes have on the environment and how will it affect the ability to cohabitate the globe with the natural world and other nations? The answers remain to be seen.

Vocabulary Words

- Assembly Line
- Industrial
- Innovation
- Labor
- Mass Production
- Mechanization
- Revolution
- Skilled Craftspeople
- Union

Think Like... Cards & Question Formulation Technique



Unit Compelling Question

How does innovation impact people's lives?



Unit Supporting Question

How did the Industrial Revolution change the production of goods?

Overview

This pre-lesson activity will illustrate tools students can use to help them analyze primary sources in later parts of Read Iowa History. One tool is the [Think Like... cards](#), which students use to identify disciplinary literacy perspectives, key vocabulary and questions asked by a historian, geographer, economist and political scientist. To prepare students to analyze images and documents, this activity is aimed to remind them that the impact of one's experience shapes their perspective on different topics, such as the Age of Industry.

The other tool is the [Question Formulation Technique \(QFT\)](#), which was created by the Right Question Institute. The steps of the QFT are designed to stimulate three types of thinking: divergent thinking, convergent thinking and metacognitive thinking.

Source Background

In the late 1700s, inventions in the textile industry in Great Britain were the first signs of major changes in a revolution in production. Steam-powered machines began to do what animals or people had formerly done by hand. Textile mills could produce high quality cloth cheaply and in huge quantities. Factories sprang up, creating new jobs for factory workers but driving individual weavers who usually worked at home out of business and leading to the growth of cities. Industrialization spread to the iron industry, creating greater demands for mining of ore and coal. For their owners, factories could create great wealth. Workers, however, often toiled for long hours for low pay under harsh working conditions.

Instructions

- 1 Introduce the compelling question: How does innovation impact people's lives?
 - Use the [vocabulary list](#) to define **innovation**.
- 2 **Question Formulation Technique (QFT):** This pre-lesson activity is meant to encourage students to ask questions, which is an important step in them taking ownership of their learning. Prior to class, it is recommended you watch the [12-minute QFT instruction video](#). In the video, a fourth-grade teacher uses QFT to learn more about what her students know or do not know about fractions.

Instructions continued on next page

Materials

- [Think Like... cards](#)
- [Vocabulary List](#)
- [QFT instruction video](#)
- [Industrial Revolution video](#)
- [Worksheet](#)
- Paper/Notebook
- Pencil

Think Like... Cards & Question Formulation Technique

Instructions continued

- 3 Have the class watch this [Turning Points in History - Industrial Revolution video](#) while considering the compelling question. Use the QFT to ask questions and assess the video with students. Follow the steps below to assist students in their analysis.
 - Write as many student questions as you can on the board or on chart paper.
 - Do not stop to discuss, judge or answer any questions.
 - Write down every question exactly as stated, change any statements to questions.
 - Sort and prioritize questions.



Goldie's History Kit Connection: To continue the introduction to the Industrial Revolution, read the [Industrial Revolution: The 20th Century](#) and discuss the questions.

- 4 After sharing the prioritized questions, discuss with students what social studies discipline (use disciplines from the Think Like... Cards) that the question falls under. Use the [Think Like... cards](#) to assist with the inquiry. Post questions on chart paper or social studies notebook for students to answer as they learn more.



Goldie's History Kit Connection: There are two other Think Like... cards included, [Edward T. Devine](#) and [John Frederick Boepple](#). These cards connect directly to the theme of the kit. Feel free to include them in this exercise or use them with the Kit Connections.

- 5 Model how to take notes on the [Check for Understanding worksheet](#), which focuses on the supporting question: How did the Industrial Revolution change the production of goods?
 - Some examples include: new machines, work done faster, cost less money, food cost less, steamboats, trains, transportation, factories, more jobs

Think Like...Cards

This is are the State Historical Society of Iowa's Think Like...Cards for the pre-lesson activity 1. The cards included focus on the perspective of a geographer, economist, political scientist and historian. A larger, printable version made for reproduction is available in the Student Materials PDF.

Think Like a Geographer

A person who studies the environment and how it impacts people.

- Describe details about this location. What do you notice that can help figure out where this place is located? What is unique?
- Why would people move to or leave this place?
- How would people travel to this location? How has traveling to this location changed over time?
- Describe details about people who live here and how they impact the location? How does the location impact the people who live there?

Think Like an Economist

A person who studies the way people make decisions about money.

- Describe the people in relation to the location. What jobs or occupations do you think people had? Why do you say that? How do you think they met their needs and wants?
- How do decisions made by individuals affect themselves and the economy?
- How do decisions made by businesses affect people?
- How do jobs impact people and the economy? Describe what happens when jobs are lost.

Think Like...Cards

This is are the State Historical Society of Iowa's Think Like...Cards for the pre-lesson activity 1. The cards included focus on the perspective of a geographer, economist, political scientist and historian. A larger, printable version made for reproduction is available in the Student Materials PDF.

Think Like a Historian

A person who explains changes that happened in the past.

- What happened in the past? Why is it important to understand what has happened in the past?
- How did past decisions or actions significantly transform people's lives?
- What has changed or stayed the same over time? Who benefited from the change? Why? Who did not benefit? Why?
- Who or what made changes happen? Who supported the change? Who didn't? Why?







Think Like a Political Scientist

A person who studies governments and how they work.

- What problems might people have faced in this society?
- What rights do people have? What rights are people missing?
- What might lead to people being treated fairly? What might lead to people being treated unfairly?
- What information can be gathered about trends at this location or time period that might change or impact the future?

Check for Understanding

This is an example worksheet that corresponds with the instructions throughout this Read Iowa History to take notes. This version of the worksheet is for you, the educator, to fill out, add notes and utilize. A version of this worksheet is available for reproduction to students in this topic's Student Materials PDF.

How did the Industrial Revolution change the production of goods?	
<p>Turning Points in History - Industrial Revolution (video)</p> 	<hr/> <hr/> <hr/> <hr/>
<p>Occupational Portrait of a Watchmaker, between 1840 and 1860</p> 	<hr/> <hr/> <hr/> <hr/>
<p>Occupational Portrait of a Blacksmith, between 1850 and 1860</p> 	<hr/> <hr/> <hr/> <hr/>
<p>Occupational Portrait of Two African American Chimney Sweeps, between 1860 and 1870</p> 	<hr/> <hr/> <hr/> <hr/>
<p>Barrel Makers in Union, Iowa</p> 	<hr/> <hr/> <hr/> <hr/>
<p>Occupational Portrait of a Woman Working at a Sewing Machine, ca. 1853</p> 	<hr/> <hr/> <hr/> <hr/>

Check for Understanding

<p>African-American Women Weaving Rug at Hampton Institute in Virginia, 1899</p> 	<hr/> <hr/> <hr/> <hr/> <hr/>
<p>Sadie Pfeifer, Child Worker, at Lancaster Cotton Mills in South Carolina, November 30, 1908</p> 	<hr/> <hr/> <hr/> <hr/> <hr/>
<p>"Assembly Line at the Ford Motor Company's Highland Park Plant," ca. 1913</p> 	<hr/> <hr/> <hr/> <hr/> <hr/>
<p>Washing Machine Assembly Line in Maytag Plant in Newton, Iowa, 1949</p> 	<hr/> <hr/> <hr/> <hr/> <hr/>
<p>"More Than Just Washing Machines" Article about Maytag Plant in Newton, Iowa, June 21, 2019</p> 	<hr/> <hr/> <hr/> <hr/> <hr/>

“Rise of Industrial America: Work in the Late 19th Century”



Unit Compelling Question

How does innovation impact people’s lives?



Unit Supporting Question

How did the Industrial Revolution change the production of goods?

Overview

This pre-lesson activity will provide an opportunity for students to use the close reading strategy while focusing on literacy standards of main idea, details and summarizing, as well as understanding context of the time period of industrialization. This reading passage will be a reference throughout the lesson.

Source Background

In the late 1700s, inventions in the textile industry in Great Britain were the first signs of major changes in a revolution in production. Steam-powered machines began to do what animals or people had formerly done by hand. Textile mills could produce high quality cloth cheaply and in huge quantities. Factories sprang up, creating new jobs for factory workers but driving individual weavers who usually worked at home out of business and leading to the growth of cities. Industrialization spread to the iron industry, creating greater demands for mining of ore and coal. For their owners, factories could create great wealth. Workers, however, often toiled for long hours for low pay under harsh working conditions.

Instructions

- 1 Distribute a copy of [“Rise of Industrial America: Work in the Late 19th Century”](#) to students from the Library of Congress for a close read of the text. This reading passage introduces students to what is the industrial revolution and effects of it on the United States.
- 2 Use the [close reading strategy](#) with students to analyze the passage. You can do this as a group or students can work independently as a formative assessment.
 - **First reading:** Read the passage carefully to gain basic understanding. What is the text mainly about? What is the main idea? Write the main idea in the top margin of the [“Take Notes” worksheet](#). *Students will highlight evidence on the passage in green.*
 - **Second reading:** Read again and dig deeper. What are the big ideas that connect to the main idea? *Students will highlight evidence on the passage in yellow and write them on the worksheet.*
 - **Third Reading:** Read again and dig for details. What are the details for your big ideas? *Students will highlight evidence on the passage in red and write them on the worksheet.*

Materials

- [“Rise of Industrial America: Work in the Late 19th Century”](#)
- Three worksheets: [Close Reading Strategy](#), [Take Notes about Passage](#), [Summary of Passage](#)
- Markers (*suggested colors: green, red, and yellow*)
- Pencil

Instructions continued on next page

“Rise of Industrial America: Work in the Late 19th Century”

Instructions continued

- **Fourth Reading:** Students will read the passage one more time to summarize their thinking. They will then summarize the passage in five to seven sentences using their main idea and details they collected on the worksheet to determine key concepts and ideas. Students will write the summary on the [Summary of Passage worksheet](#).

- 3 Students will refer back to this reading passage throughout the Read Iowa History to focus on different aspects.



Goldie's History Kit Connection: To continue the introduction to the Industrial Revolution, read the [Turning Points in U.S. History: Industrial Revolution](#) and discuss the questions.

- 4 **Formative Assessment:** Use this activity as a formative assessment if you decide to have students complete this on their own. If students have not used this strategy or procedure before, you can use the worksheets as a modeling experience to teach the close reading strategy.

Rise of Industrial America

[Work in the Late 19th Century](#)

The late 19th-century United States is probably best known for the vast expansion of its industrial plant and output. At the heart of these huge increases was the mass production of goods by machines. This process was first introduced and perfected by British textile manufacturers.



In the century since such mechanization had begun, machines had replaced highly skilled craftspeople in one industry after another. By the 1870s, machines were knitting stockings and stitching shirts and dresses, cutting and stitching leather for shoes, and producing nails by the millions. By reducing labor costs, such machines not only reduced manufacturing costs but lowered prices manufacturers charged consumers. In short, machine production created a growing abundance of products at cheaper prices.

Mechanization also had less desirable effects. For one, machines changed the way people worked. Skilled craftspeople of earlier days had the satisfaction of seeing a product through from beginning to end. When they saw a knife, or barrel, or shirt or dress, they had a sense of accomplishment. Machines, on the other hand, tended to subdivide production down into many small repetitive tasks with workers often doing only a single task. The pace of work usually became faster and faster; work was often performed in factories built to house the machines. Finally, factory managers began to enforce an industrial discipline, forcing workers to work set--often very long--hours.

One result of mechanization and factory production was the growing attractiveness of labor organization. To be sure, craft guilds had been around a long time. Now, however, there were increasing reasons for workers to join labor unions. Such labor unions were not notably successful in organizing large numbers of workers in the late 19th century. Still, unions were able to organize a variety of strikes and other work stoppages that served to publicize their grievances about working conditions and wages. Even so, labor unions did not gain even close to equal footing with businesses and industries until the economic chaos of the 1930s.

To find other documents in American Memory relating to this topic, you might use the terms work or workers, factories, or specific occupations such as miner, machinist, factory worker, or machine operator.

Close Reading Strategy

These example worksheets correspond with the instructions in pre-lesson activity 2 to do a close read, take notes and write a summary. These versions of the worksheets are for you, the educator, to fill out, add notes and utilize. Versions of these worksheets are available for reproduction to students in this topic's Student Materials PDF.

Title of the text:

1. Read carefully to gain basic understanding.

What is the text mainly about? What is the **main idea**? Write the main idea in the top margin in the clouds of the paper. *Highlight evidence in green.*

2. Read again and dig deeper.

What are the **big ideas** that connect to the main idea? *Highlight evidence in yellow and write them on the note-taking sheet on the next page.*

3. Read again and dig for details.

What are the details for your big ideas? *Highlight evidence in red and write them on your note-taking sheet.*

4. Read again to summarize your thinking.

Summarize the article in five to seven sentences using your main idea, details, on your worksheet to determine key concepts and ideas. Write the summary on the back of the worksheet.

Taking Notes about Reading Passage

<p>Introductory Paragraph</p> <p>The main idea is...</p>	<hr/> <hr/> <hr/> <hr/>
<p>Paragraph 2</p> <p>Details...</p>	<p>The big idea of the paragraph is _____</p> <hr/> <ul style="list-style-type: none"> ● _____ ● _____ ● _____ ● _____ ● _____
<p>Paragraph 3</p> <p>Details...</p>	<p>The big idea of the paragraph is _____</p> <hr/> <ul style="list-style-type: none"> ● _____ ● _____ ● _____ ● _____ ● _____
<p>Paragraph 4</p> <p>Details...</p>	<p>The big idea of the paragraph is _____</p> <hr/> <ul style="list-style-type: none"> ● _____ ● _____ ● _____ ● _____ ● _____
<p>Conclusion Paragraph</p> <p>The concluding idea is...</p>	<hr/> <hr/> <hr/>

Skilled Craftspeople and the Industrial Revolution



Unit Compelling Question

How does innovation impact people's lives?



Unit Supporting Question

How did the Industrial Revolution change the production of goods?

Overview

Students will analyze historical images of craftsmen.

Source Background

As late as the 1820s, skilled craftspeople, known as artisans or mechanics, performed most manufacturing in small towns and larger cities. They made shoes and clothing, built houses, and set type for printed material. These craftspeople manufactured goods in traditional ways, by hand in their own homes or in small shops located nearby, and marketed the goods they produced.

Instructions

- 1 Introduce students to the supporting question: How did the Industrial Revolution change the production of goods?
 - Use the [vocabulary list](#) to define **skilled craftspeople**.
- 2 Students will analyze the four primary source images using the [Image Analysis worksheet](#).
- 3 After completing the worksheet, students will share their questions and research to find answers to their questions. A possible website for research is "[Profiling Portraits: Occupational Portraits of the 19th Century.](#)"
- 4 Have students record "notes" of their evidence on the [Check for Understanding worksheet](#) for each source that will help answer the supporting question: How did the Industrial Revolution change the production of goods?

Materials

- Primary sources
- Pencil
- [Image Analysis worksheet](#)
- [Answering Questions, Citing Sources worksheet](#)



Goldie's History Kit Connection: To explore objects that helped skilled craftspeople, refer to the [Lunch Bucket](#) and [Telegraph Relay](#). Discuss the objects and the questions.

- 5 **Formative Assessment:** Have students complete the [Answering Questions, Citing Sources worksheet](#).

Occupational Portrait of a Watchmaker, between 1840 and 1860

PART 1



Courtesy of Library of Congress, "Occupational portrait of a watchmaker, three-quarter length, seated at table with watches," between 1840 and 1860



Courtesy of Library of Congress "Occupational Portrait of a Blacksmith," between 1850 and 1860

Occupational Portrait of Two African-American Chimney Sweeps, between 1860 and 1870

PART 1



Courtesy of Library of Congress, "Occupational Portrait of Two African American Chimney Sweeps," Charles D. Fredricks & Co., between 1860 and 1870



Courtesy of the State Historical Society of Iowa, "Barrel Makers in Union, Iowa," Date Unknown

Image Analysis Worksheet

These are example worksheets that corresponds with the instructions in Part 1 to analyze the images related to the Industrial Revolution. This version of the worksheet is for you, the educator, to fill out, add notes and utilize. A printable version of this worksheet is available for reproduction in this topic's Student Materials PDF.



Analyze Two Images

1. Stop and Source

2. Examine each image closely.

- Who is in the pictures? Describe the person(s) you see.

Image 1:

Image 2:

- What do the pictures tell us about the people in them? What are they doing?

Image 1:

Image 2:

- When were the pictures taken?

Image 1:

Image 2:

- Where were the pictures taken?

Image 1:

Image 2:

- Why do you think the photos were taken?

Image 1:

Image 2:

Image Analysis Worksheet

3. What questions do you have about each photo?

Image 1:

Image 2:

4. From which picture did you generate more questions?

5. Where could we go to investigate/research our questions?

Answering Questions and Citing Sources

This is an example worksheet that corresponds with the instructions in Part 1 to answer student questions and citing sources. This version of the worksheet is for you, the educator, to fill out, add notes and utilize. A version of this worksheet is available for reproduction to students in this topic’s Student Materials PDF.



Answer Questions, Cite Sources

Question	Notes
Source Cited:	

Question	Notes
Source Cited:	

Question	Notes
Source Cited:	

Answering Questions and Citing Sources

Question	Notes
Source Cited:	

Question	Notes
Source Cited:	

Question	Notes
Source Cited:	

Mill Workers



Unit Compelling Question

How does innovation impact people's lives?



Unit Supporting Question

How did the Industrial Revolution change the production of goods?

Overview

Students will analyze primary sources, ask questions and research questions about the textile industry.

Source Background

The Industrial Revolution started in Great Britain in the mid-1700s. Textile production was the first great industry created. The textile industry in America began in New England during the late 18th century. By 1820, mills had spread South into Virginia and Kentucky and the first mill town was established in Massachusetts. The early mills used the putting-out system, where the mill did carding and spinning, but hand weavers were paid to weave the fabric then return it to the mill for finishing. In the 1830s, improved machinery allowed mills to do the entire process with machines, greatly reducing the cost of cotton cloth. In 1841, power looms that could manage wool were developed and affordable woollens appeared. Continued advances in textile machinery and the spread of railroads soon made inexpensive factory-produced fabrics available everywhere. By 1870, there were more than 2,400 woolen mills and hundreds of cotton mills all over the United States.

The mills completely changed how people dressed and the way they decorated their homes. By the 1830s, ordinary people could afford more clothing and poorer people began to copy the fashions of the wealthy. Curtains and other decorative textiles appeared in houses. By the middle of the century, families no longer had to spend time spinning and weaving. The factories provided a wide variety of textile products to everyone, everywhere. They were also an important source of new jobs. People moved from farms and small towns to larger towns and cities to work in factories and the many support businesses that grew up around them. The success of the textile industry fostered many other factory systems. Craftsmen and artisans of all types were replaced as stores and mail-order catalogs marketed inexpensive manufactured goods to all.

Instructions

- 1 Ask students to think about the compelling (How does innovation impact people's lives?) and supporting question (How did the Industrial Revolution change the production of goods?) as they investigate sources.
- 2 Analyze the images below using a [K-W-L \(Know-Wonder-Learn\) chart](#):
 - [African-American Women Weaving Rug at Hampton Institute in Virginia, 1899](#)
 - [Sadie Pfeifer, Child Worker, at Lancaster Cotton Mills in South Carolina, November 30, 1908](#)
 - [Occupational Portrait of a Woman Working at a Sewing Machine, ca. 1853](#)

Instructions continued on next page

Materials

- Primary sources
- [K-W-L chart](#)
- Pencil
- **Suggested Books:** *The Bobbin Girl* by Emily Arnold McCully; more books listed on the next page

Mill Workers

Instructions continued

- 3 Students will use the vocabulary words ([see definitions](#)) listed and relate them to the images: Innovation, Industrial, Revolution, Mechanization, Labor, Union.
- 4 Have students create and share questions while considering it through [disciplinary literacy lenses](#).



Goldie's History Kit Connection: To explore objects that further connect to mill workers, refer to [Sewing Machine](#) and [Bodice](#). Discuss the objects and questions.

- 5 Read and connect the analyzed images to the reading passage, "[Rise of Industrial America: Work in the Late 19th Century](#)" (transcribed excerpt [available](#)). Explain how the events and concepts in this text, including what happened and why, impacted innovation and how they changed the production of goods.
- 6 Students will generate questions that will help answer the compelling and supporting questions. Have them use the [Answering Questions, Citing Sources worksheet](#). Below are some possible research websites and books:
 - [Industrial Revolution](#): This webpage from the History Channel provides some important historical context about the Industrial Revolution.
 - [The Rise of the Industrial Revolution](#): This video focuses on the development of the spinning machine by Sir Richard Arkwright in England, which led directly to the rise of the Industrial Revolution, and a new world of manufactured products.
 - [The Industrial Revolution](#): This video shows an assembly line at work during the Industrial Revolution. Beginning in the 19th century, advances in manufacturing revolutionize the American way of life.
 - [The Mill Girls of Lowell](#): This website from the National Park Service focuses on the stories of the girls and young women that worked at the textile mills in Lowell, Massachusetts.
 - *The Bobbin Girl* by Emily Arnold McCully
 - *Brave Girl: Clara and the Shirtwaist Makers' Strike of 1909* by Michelle Markel
 - *The Industrial Revolution for Kids: The People and Technology That Changed the World* by Cheryl Mullenbach



Goldie's History Kit Connection: To learn about an Iowan who fought against child labor during the Industrial Revolution, refer to the [Think Like... Edward T. Devine card](#). Discuss the biography and questions.

- 7 Discuss the research, answers and sources from students and relate them back to the compelling and supporting questions.
- 8 **Formative Assessment:** Ask students to record "notes" of their evidence for each source that will help answer the supporting question: How did the Industrial Revolution change the production of goods? Students will record these notes on their [Check for Understanding worksheet](#).

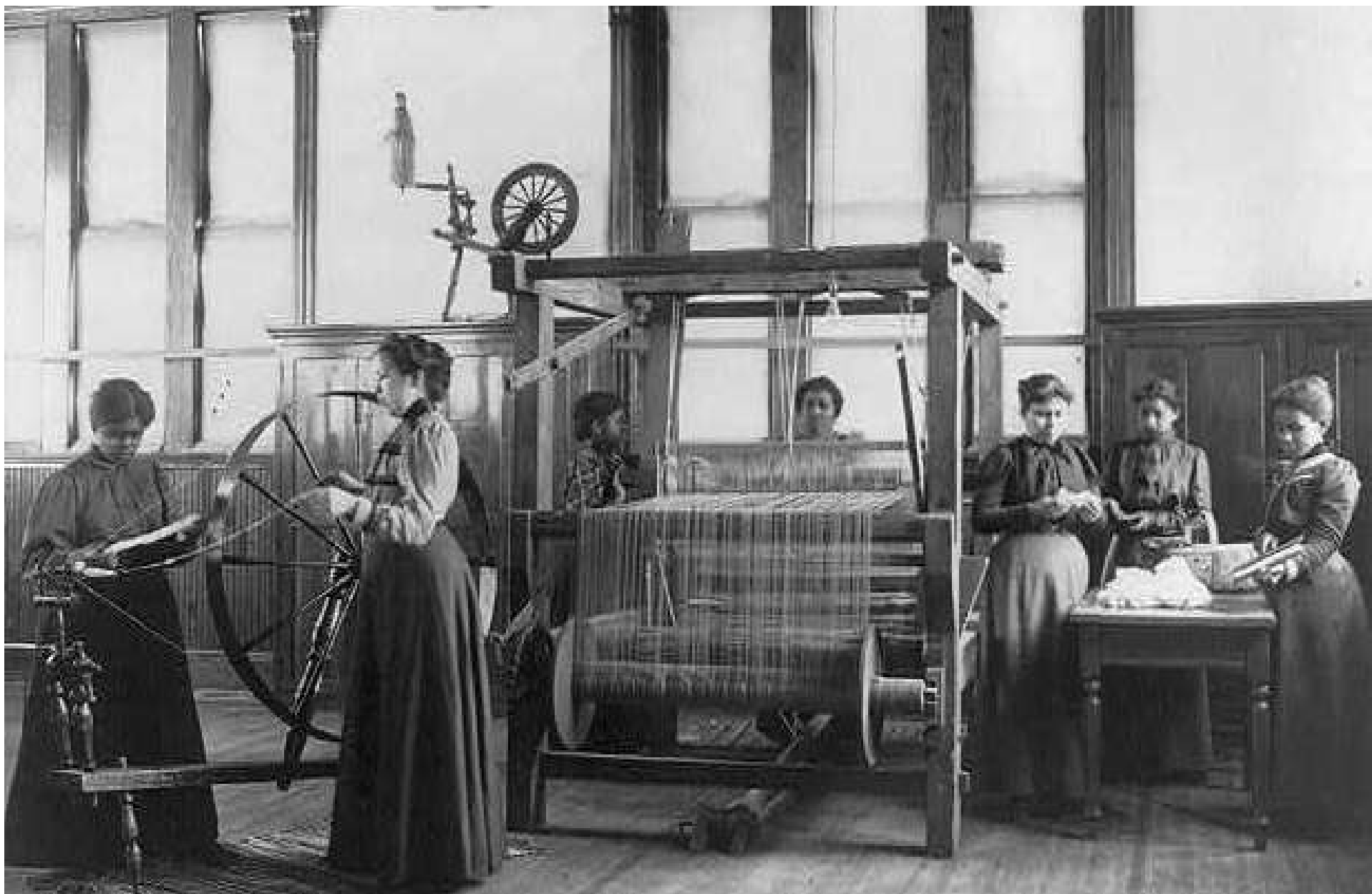
More Materials

• Suggested Books:

Brave Girl: Clara and the Shirtwaist Makers' Strike of 1909 by Michelle Markel;
The Industrial Revolution for Kids: The People and Technology That Changed the World by Cheryl Mullenbach

African-American Women Weaving Rug at Hampton Institute in Virginia, 1899

PART 2



Courtesy of Library of Congress, Roskam, Edwin, "Swimming pool created by CCC (Civilian Conservation Corps) dam, Huntingdon, Pennsylvania," July 1941

Sadie Pfeifer, Child Worker, at Lancaster Cotton Mills in South Carolina,
November 30, 1908

PART 2



Courtesy of Library of Congress, Hine, Lewis Wickes, "Sadie Pfeifer, 48 inches high, has worked half a year..." 30 November 1908

Occupational Portrait of a Woman Working at a Sewing Machine, ca. 1853

PART 2



Courtesy of Library of Congress, "Occupational Portrait of a Woman Working at a Sewing Machine," ca. 1853

K-W-L Chart: Image Analysis

This is an example K-W-L worksheet that corresponds with the instructions to analyze primary source images. This directed-learning version of the worksheet is for you, the educator, to fill out, add notes and utilize. A printable version of this worksheet is available for reproduction in this topic’s Student Materials PDF.



K-W-L Chart

K What We Think We Know	W What We Want to Know	L What We Hope to Learn
Stop and Source	Why do you think they’re doing this?	Where could you find the answers?
People:	How do you think they are feeling?	
Objects:	When do you think these photos were taken? How do you know?	
What are they doing?	Questions these photos raise:	

K-W-L Chart: Image Analysis

This is an example K-W-L worksheet that corresponds with the instructions to analyze primary source images. This blank version of the worksheet is for you, the educator, to fill out, add notes and utilize. A printable version of this worksheet is available for reproduction in this topic's Student Materials PDF.



K-W-L Chart

K What We Think We Know	W What We Want to Know	L What We Hope to Learn

Answering Questions and Citing Sources

This is an example worksheet that corresponds with the instructions in Part 2 to answer student questions and citing sources. This version of the worksheet is for you, the educator, to fill out, add notes and utilize. A version of this worksheet is available for reproduction to students in this topic's Student Materials PDF.



Answer Questions, Cite Sources

Question	Notes
Source Cited:	

Question	Notes
Source Cited:	

Question	Notes
Source Cited:	

Answering Questions and Citing Sources

Question	Notes
Source Cited:	

Question	Notes
Source Cited:	

Question	Notes
Source Cited:	

The Rise of Assembly Lines



Unit Compelling Question

How does innovation impact people's lives?



Unit Supporting Question

How did the Industrial Revolution change the production of goods?

Overview

Students will investigate Henry Ford and the assembly line process to understand the cause and effect impacts of technology and factory work.

Source Background

On December 1, 1913, Henry Ford installed the first moving assembly line for the mass production of an entire automobile. His innovation reduced the time it took to build a car from more than 12 hours to one hour and 33 minutes. Ford's Model T, introduced in 1908, was simple, sturdy and relatively inexpensive – but not inexpensive enough for Ford, who was determined to build motor cars for any citizen to own.

Instructions

- 1 Introduce new words through the [vocabulary list](#) to define **mechanization**, **mass production** and **assembly line**.
- 2 Students will analyze the image “Assembly Line at the Ford Motor Company’s Highland Park Plant” and record their thinking in a [K-W-L \(Know, Wonder Learn\) chart](#). Have students create and share questions about the assembly line while considering [disciplinary literacy lenses](#).
- 3 As a class, read about Henry Ford to answer student-generated questions. Suggested books are listed in the materials box.
- 4 Watch the [Ford assembly line video](#) and discuss the cause and effects and the impact of technological changes.



Goldie's History Kit Connection: To learn about the natural resource that kept assembly lines moving, refer to the [Coal Hod, Shovel and Piece of Coal](#). Discuss the object and questions.

To further explore people who used assembly lines and advances from the Industrial Revolution, refer to [The Man Who Loved Libraries: The Story of Andrew Carnegie](#) and [Mr. Ferris and His Wheel](#). Read the books and discuss the questions.

Materials

- “Assembly Line at the Ford Motor Company’s Highland Park Plant” image
- [K-W-L chart](#)
- [Ford assembly line video](#)
- [Sentence Starter worksheet](#)
- **Suggested Book:** *Full of Beams: Henry Ford Grows A Car* by Peggy Thomas; *Henry Ford: Father of the Auto Industry (A True Book: Great American Business)* by Josh Gregory

Instructions continued on next page

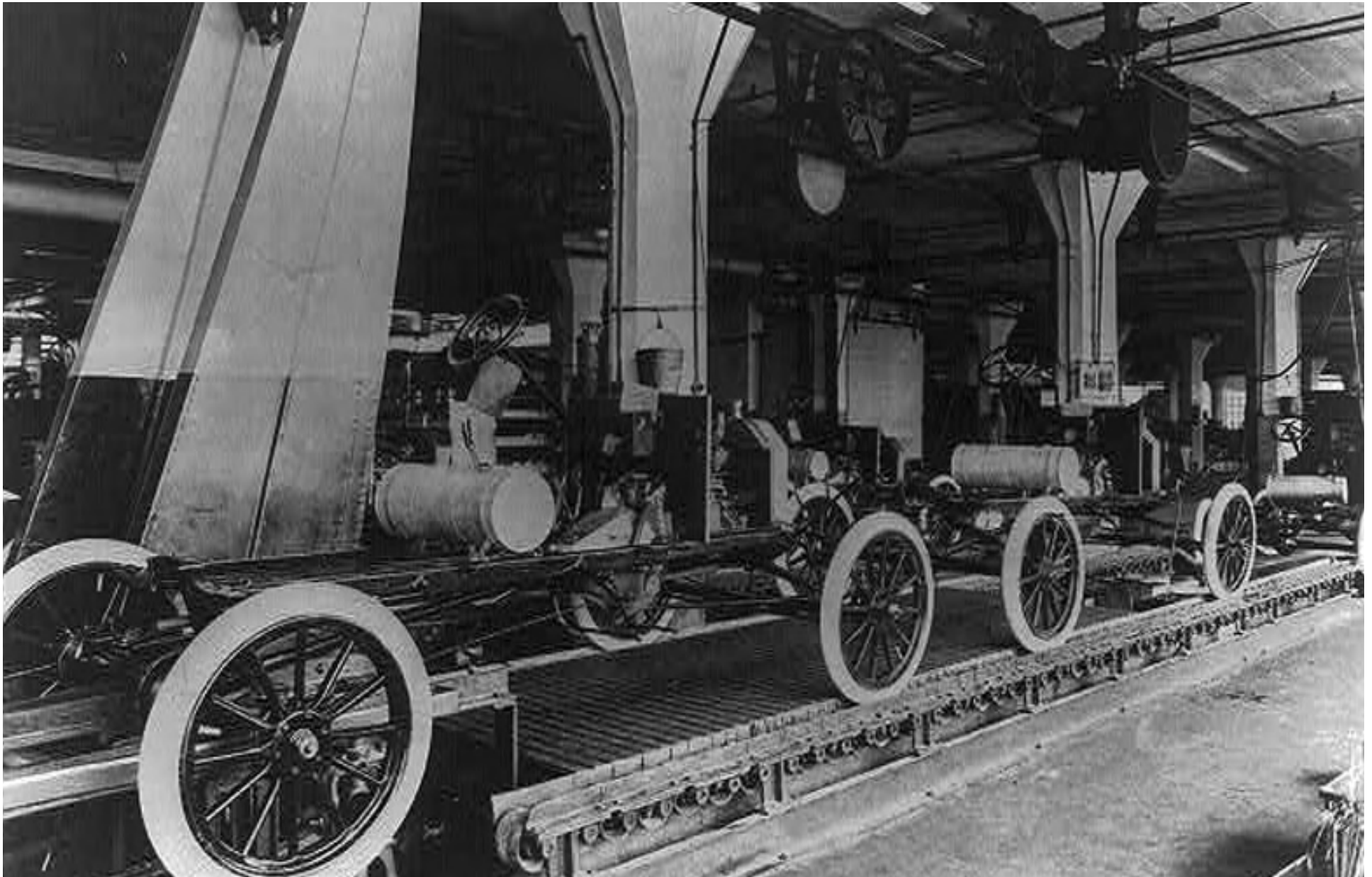
The Rise of Assembly Lines

Instructions continued

- 5 Refer back to the close read, [“Rise of Industrial America: Work in the Late 19th Century.”](#) Have students make connections to the assembly line, mass production and pros and cons of the age of industry.
- 6 **Formative Assessment:** Ask students to record “notes” of their evidence for each source that will help answer the supporting question: How did the Industrial Revolution change the production of goods? Use the [Sentence Starter worksheet](#) to encourage students to make a claim about cause and effects and the impact of technological changes of the assembly line.

**“Assembly Line at the Ford Motor Company’s Highland Park Plant,”
ca. 1913**

PART 3



Courtesy of Library of Congress "Assembly Line at the Ford Motor Company's Highland Park Plant," ca. 1913

K-W-L Chart: Image Analysis

This is an example K-W-L worksheet that corresponds with the instructions to analyze primary source images. This directed-learning version of the worksheet is for you, the educator, to fill out, add notes and utilize. A printable version of this worksheet is available for reproduction in this topic’s Student Materials PDF.



K-W-L Chart

K What We Think We Know	W What We Want to Know	L What We Hope to Learn
Stop and Source	Why do you think they’re doing this?	Where could you find the answers?
People:	How do you think they are feeling?	
Objects:	When do you think this photo was taken? How do you know?	
What are they doing?	Questions this photo raises:	

K-W-L Chart: Image Analysis




This is an example K-W-L worksheet that corresponds with the instructions to analyze primary source images. This blank version of the worksheet is for you, the educator, to fill out, add notes and utilize. A printable version of this worksheet is available for reproduction in this topic's Student Materials PDF.



K-W-L Chart

K What We Think We Know	W What We Want to Know	L What We Hope to Learn

This is an example sentence starter worksheet that corresponds with the instructions to Part 3 to make a claim. This version of the worksheet is for you, the educator, to utilize. A printable version of this worksheet is available in this topic's Student Materials PDF.

Claim	Evidence	Reasoning
 <p>My claim is... I think... I noticed...</p> <hr/> <hr/> <hr/> <hr/> <hr/>	 <p>I found...; My evidence is... My proof is... Another example... I know this is true because...</p> <hr/> <hr/> <hr/> <hr/> <hr/>	 <p>This happened because... The reason for this is... I conclude...</p> <hr/> <hr/> <hr/> <hr/> <hr/>

Manufacturing in Iowa



Unit Compelling Question

How does innovation impact people's lives?



Unit Supporting Question

How did the Industrial Revolution change the production of goods?

Overview

Students will analyze sources related to Maytag, an Iowa company that impacted technological changes over time in Iowa. They will view three sources that can be compared.

Source Background

Many people think of Iowa as a farming state. Would it be surprising to hear that many different types of industry and manufacturing have existed in Iowa for a long time? Early Iowa industry was focused on processing the materials grown and raised on the land. Later, industry expanded to include many different manufactured items. Some Iowa companies have specialized in making appliances for the home. These companies started in the early 1900s when many homes were first wired for electricity. The Maytag Company in Newton began making washing machines in 1907. In 1934, George Foerstner of Amana founded a company that made refrigerators. By the 1960s, his company, Amana Refrigeration, introduced the Radarange, the first microwave oven.

Instructions

- Analyze the impact of technological changes in Iowa while viewing the three resources below:
 - [Washing Machine Assembly Line in Maytag Plant in Newton, Iowa, 1949](#)
 - ["The 1938 Maytag Strike" article](#)
 - ["More Than Just Washing Machines" Article about Maytag Plant in Newton, Iowa, June 21, 2019](#) (transcribed excerpts [available](#))
- Use a [triple Venn diagram](#) to record similarities and differences.
- Discuss: How did the production of goods change over time for Maytag? In the "More Than Just Washing Machines" article, Bill Perrenoud, executive director of the Jasper County Historical Museum, said one of the catchphrases was "Newton needs Maytag." He also said, "...And I think there's a lot of truth to that. Newton would not have been half the community it would have." What text evidence supports this statement?

Materials

- [Washing Machine Assembly Line in Maytag Plant in Newton, Iowa, 1949 image](#)
- ["The 1938 Maytag Strike" article](#)
- [Triple Venn diagram](#)



Goldie's History Kit Connection: To learn more about other Iowa manufacturing, refer to the [Keota Glass Works](#); [Eagle Glass Works](#) and [Pottery](#). Discuss the objects and questions. Additionally, refer to the [Think Like... John Frederich Boepple card](#). Discuss the biography and questions.

Instructions continued on next page

Manufacturing in Iowa

Instructions continued

- 4 Formative Assessment:** Students will make a claim regarding “How did Maytag’s change production of goods impact Iowa?” Students will record their evidence in their [Check for Understanding worksheet](#) for each source to answer the supporting question: How did the Industrial Revolution change the production of goods?



Courtesy of State Historical Society of Iowa, "Washing Machine Assembly Line in Maytag Plant," 1949

"More Than Just Washing Machines" Article about Maytag Plant in Newton, Iowa, June 21, 2019

More than just washing machines Museum delves into Maytag's varied production history

*By Christopher Braunschweig Newton Daily News
June 21, 2019*

Jack Streeter, board president of the Jasper County Historical Society, conducts a tour Thursday at the Jasper County Historical Society. As one might expect, displays are dedicated to the Maytag Corporation, which once held offices and factories in Newton until its purchase to the Whirlpool Corporation.

Surrounded by, at one time, nine similar businesses in Newton, a place that many folks considered to be the "washing machine center of the world," the Maytag Corporation emerged on top as the premiere company that outlasted its competition, until it was purchased by Whirlpool Corporation in 2006 and subsequently closed its facilities.

As one might expect, the longtime manufacturer's flagship products — wooden, aluminum and metal variants alike — take up a lot of space at the Jasper County Historical Museum, but as do its other, lesser known appliances and items.

Jack Streeter, board president of the Jasper County Historical Society, said the Maytag factories used to produce agricultural equipment and other home appliances. A seed grader and an old vacuum are on display at the local museum to prove it. One item the museum doesn't have is an old Maytag tractor, which are very difficult to come by. For now, a picture will suffice.

"We started out making farm equipment and made threshing machines and things like that, and then they dabbled into washing machines," Streeter, 92, said Thursday. "And finally they found out the market for washing machines was a lot better than the market for farm equipment."

Founded 126 years ago by F. L. Maytag, the Newton business was once the workplace of the 92-year-old Streeter, who became head of the maintenance department for Maytag Plant 2. He retired from the company after 39 years. Streeter's mother and father had also worked at Maytag. Now, he gets to revisit his old employment and teach others about the company at the museum.

Maytag was the first company, Streeter added, to build a cast aluminum washing machine body in the 1920s, a style that was very popular among customers and would eventually kickstart the company into national recognition. Streeter said his parents had a similar model in their basement for "20-some years."

Bill Perrenoud, executive director of the Jasper County Historical Museum, said Maytag was known for its dependability, at least that's how the company sold itself as. Calling it a "top notch business" back in its heyday, Perrenoud referred to a piece on display in the museum that says: "When you meet a Maytag salesman, you meet a gentleman."

He added, “That was their image, and they portrayed that. The locations where they sold their washers appreciated that. They knew they were going to have gentleman; if they were to make an agreement they’d follow through on it. The Maytags hired good people (to make and sell products).”

Curiously enough, the gas-powered engines packed inside Maytag’s washing machines found other uses and could power other appliances like lawnmowers and pumps. Staff at the Jasper County Historical Museum have arranged the engines like marble busts inside its South 15th Avenue West facility.

A small race car on display at the museum, Street said, was not sold commercially, but rather was a promotional or sales item. And how did that car operate exactly? The gas-powered engine that was used in a Maytag-brand washing machine.

Researching new additions for its signature product was nothing new for Maytag either. Streeter pointed out a machine on display that was able to do more than wash clothes. With the right kind of attachment, it could churn butter and grind meat. Granted, it couldn’t do all three actions at once. Maytag had even tried adding an ice cream maker attachment.

Ironing machines, dishwashers, refrigerators and more. If Maytag determined a need for something, the company would make it. Staff said a Maytag room is currently under development that further highlight’s the Maytag family’s other ventures besides washing machines, like craft beer and blue cheese.

Maytag didn’t seem to be afraid to try new products, successful or not. However, Perrenoud said the choice in products was not random. The company, he said, likely put in a lot of research hours and listened to the needs of its customers to decide what appliance would be distributed.

“It was well-thought-out,” Perrenoud said. “You take a look at the different washing machines they produced and the changes they made from one model to the next would be looking for improvements. And before they made those improvements they tested them.”

When he toured Maytag many years ago, Perrenoud remembered seeing the company’s test facility where researchers were, among other things, analyzing “load after load after load” of laundry to see how well their machines held up. Niche items, he continued, didn’t seem to scare away Maytag.

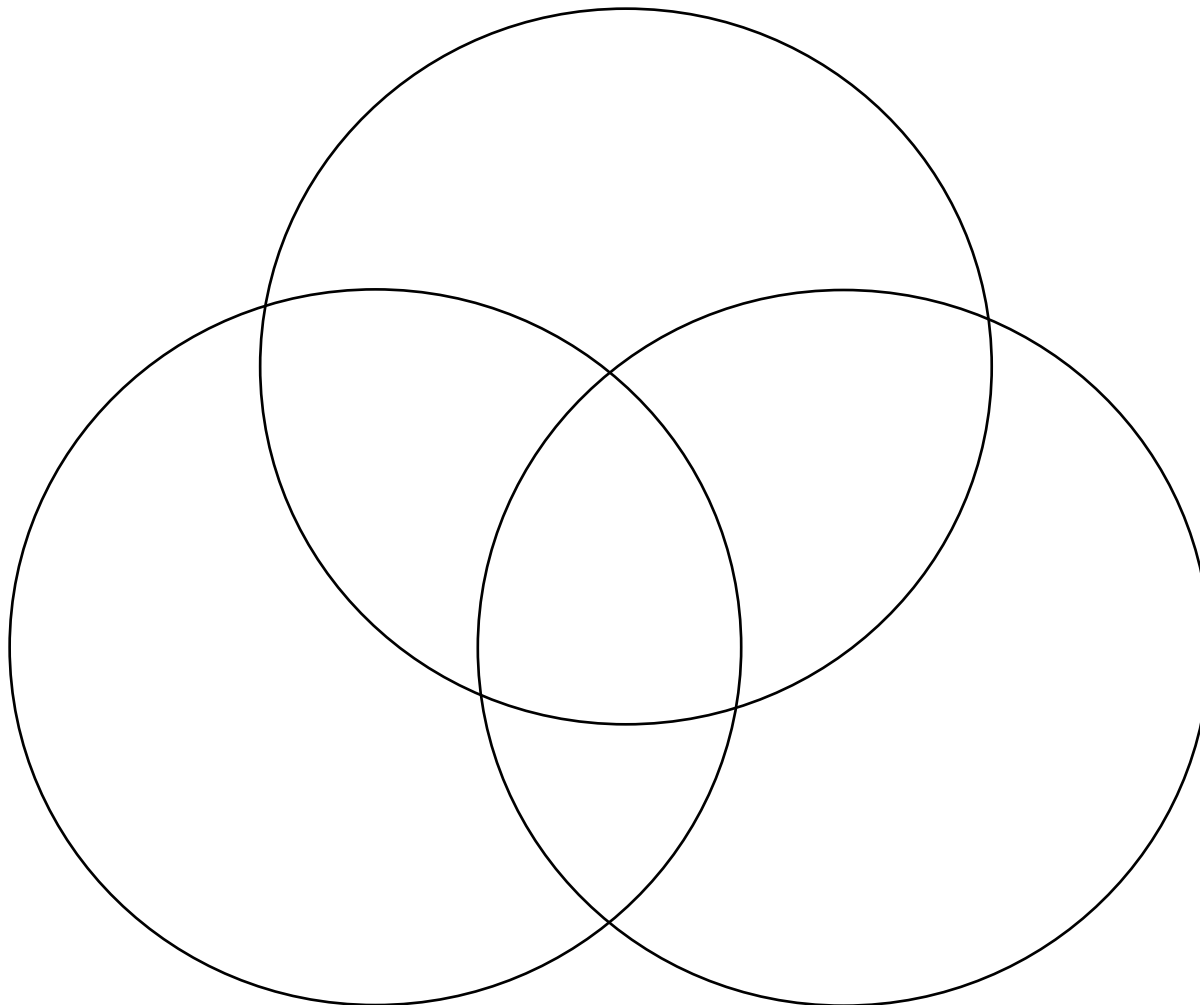
Although Maytag Corporation is no longer in Newton, the company certainly left a lasting impression on the community. The family name is ingrained in the town’s infrastructure. Perrenoud recalled an old Maytag advertising campaign in which the company’s mascot repairman, Ol’ Lonely, had a dog — a Basset Hound named Newton.

“One of the catchphrases was: ‘Newton needs Maytag,’” Perrenoud said. “... And I think there’s a lot of truth to that. Newton would not have been half the community it would have.”

Editor’s Note: “History Lesson” is a weekly series inspired by the Jasper County Historical Museum’s 40-year anniversary. Newton Daily News will publish a story every Friday (until the museum is closed) featuring the people who work to preserve and promote the region’s past endeavors, while also showcasing the historical and educational significance of artifacts and exhibits on display in the museum.

Triple Venn Diagram

This is an example worksheet that corresponds with instructions from Part 4 to compare sources about the impact of Maytag, an Iowa company. This version of the worksheet is for you, the educator, to utilize. A printable version of this worksheet is available in this topic's Student Materials PDF.



Lesson Summative Assessment



Unit Compelling Question

How does innovation impact people’s lives?



Unit Supporting Question

How did the Industrial Revolution change the production of goods?

Assessment Instructions

- 1 Students assemble their evidence within their [Check for Understanding worksheet](#) into an essay.
- 2 Distribute the [lesson summative assessment worksheet](#). Allow students plenty of time to write. Students can go back to the sources and the answers to their questions as they write.
- 3 Students can use the worksheet or regular notebook paper, and they can write on the notebook paper or even type their essay. Have them keep the worksheet nearby in order to consider the prompts that are in each section.
- 4 **Writing Standards:**
Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
 - W.4.1.a Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer’s purpose.
 - W.4.1.b Provide reasons that are supported by facts and details.
 - W.4.1.c Link opinion and reasons using words and phrases
 - W.4.1.d Provide a concluding statement or section related to the opinion presented.

Assessment Scoring Options

Proficient	Student shows understanding of how the Industrial Revolution changed the production of goods with answers that are accurate.
Developing	Mixture of some accurate and some inaccurate parts.
Beginning	Student unable to write any ideas in the given time and/ or ideas are very inaccurate.

Opinion Writing about the Industrial Revolution

This is an example worksheet that corresponds with instructions from the lesson summative assessment. This version of the worksheet is for you, the educator, to utilize. A printable version of this worksheet is available in this topic's Student Materials PDF.

Topic _____	
<p>Introduction/Lead Sentence</p> <p>Introduce a topic or text clearly, state an opinion:</p> <ul style="list-style-type: none"> • Hook the reader. • Restate the Question, and answer the Question: "How does innovation impact people's lives?" 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Supporting Details & Evidence</p> <ul style="list-style-type: none"> • Use a transition to begin..... • Start with a big idea sentence to state a reason and explain with evidence (tell how the evidence connects to the lead sentence). 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Supporting Details & Evidence</p> <ul style="list-style-type: none"> • Use a transition to begin..... • Start with a big idea sentence to state a reason and explain with evidence (tell how the evidence connects to the lead sentence). 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

Taking Notes about Reading Passage

<p>Supporting Details & Evidence continued</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Supporting Details & Evidence</p> <ul style="list-style-type: none"> • Use a transition to begin..... • Start with a big idea sentence to state a reason and explain with evidence (tell how the evidence connects to the lead sentence). 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Conclusion Sentence(s)</p> <p>Create a concluding statement(s).</p> <ul style="list-style-type: none"> • Restate the lead/topic sentence in a new way • Give a final, convincing thought to leave with the reader 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

Industrial Revolution Vocabulary List

Assembly Line

An assembly line is a line of machines, tools and workers in a factory that a product moves along while it is being built or produced.

Industrial

Industrial is a word used to describe things that relate to or are used in industry. This includes the people who work in factories or the things made in factories.

Innovation

An innovation describes a new method, idea, product, etc. It can refer to something completely new or to a new change made to an existing product, idea or field.

Labor

Labor is work. It is a human activity that provides the goods or services in an economy. Labor includes the services performed by workers.

Mass Production

The production of large quantities of a product by an automated mechanical process.

Mechanization

Mechanization is the introduction of machines or automatic devices into a process, activity or place. Sometimes the act or process of introducing machines into an industry or other area of activity is in order to replace human labor.

Revolution

A revolution is the sudden, complete or marked change in something. This could be related to changes in areas such as an industry, an established government, a political system or other societal norms and practices.

Skilled Craftsperson

A skilled craftsperson is a worker who practices a trade or handicraft, creating something from start to finish by hand.

Union

An organization of workers formed for the purpose of advancing and advocating for its members' interests in respect to wages, benefits and working conditions.

Additional Resources for Educators

[Industrial Revolution Primary Source Set](#)

This is a digital collection of primary and secondary sources about the history of the Industrial Revolution. This Read Iowa History unit is based on this primary source set.

[Industrial Revolution](#)

This webpage from the History Channel provides some important historical context about the Industrial Revolution.

[Profiling Portraits: Occupational Portraits of the 19th Century](#)

This resource from the Library of Congress provides more information about occupational portraits from the 19th Century and what they tell people about the past.

[The Rise of the Industrial Revolution Video](#)

This video focuses on the development of the spinning machine by Sir Richard Arkwright in England, which led directly to the rise of the Industrial Revolution, and a new world of manufactured products.

[The Industrial Revolution Video](#)

This video shows an assembly line at work during the Industrial Revolution. Beginning in the 19th Century, advances in manufacturing revolutionize the American way of life.

[Inside Ford's Moving Assembly Line Video](#)

In celebration of the 100th anniversary of the moving assembly line, introduced by Ford Motor Company and led by Henry Ford on October 7th, 1913, the automaker went inside its manufacturing facilities to document the fast-paced and efficient assembly lines.

[History of Iowa Farmers - Living History Farms](#)

This webpage from Living History Farms looks at the history of farming in Iowa and the people who are important to its growth.

["Inside the LEGO Factory: How robots & machines make LEGO" Video](#)

This video focuses on the creation of a LEGO by robots and machines.

[Invention of the Telegraph](#)

This collection from the Library of Congress includes primary sources from Samuel Morse that follow his journey to creating the telegraph.

[Industrial Revolution and Technology from National Geographic](#)

This article from National Geographic highlights inventions created during the Industrial Revolution.

Full of Beams: Henry Ford Grows A Car by Peggy Thomas

This biographical story walks through Henry Ford's life and the challenges that came from it, from the failed tractor that Henry Ford made as a teenager, to the Great Depression, as well as the switch in production that came with the beginning of World War II.

READ ALOUD

READ ALOUD

EDUCATOR MATERIALS

Industrial Revolution



4TH GRADE

Goldie's
HISTORY KITS

Industrial Revolution

Introduction

A “**read aloud**” is an effective way to promote language and literacy skills and help encourage a lifelong love of reading and learning. This Goldie’s History Kit provides four books related to the Industrial Revolution. This read aloud activity directly combines literacy and Iowa history in an easily reproducible format.

What’s Included

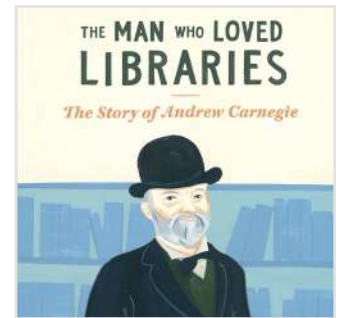
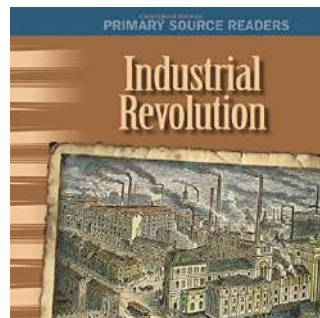
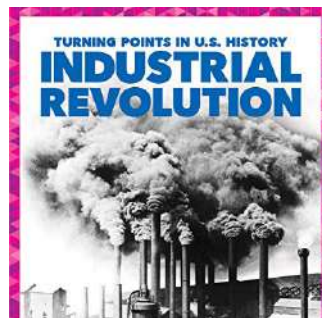
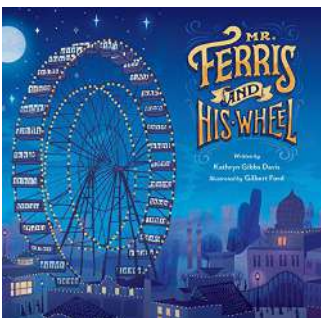
Each Read Aloud Activity Features

- Hard copy of the book (if available, digital recording included)
- Description of the book
- Reasoning for its inclusion in the kit and connection to Iowa history
- Text-dependent questions

Books

This kit contains the four storybooks listed below. Each book has an activity instruction sheet that provides: a book description, a comprehensive explanation of how this book relates to the theme, the Industrial Revolution, why it was selected and how it aligns with the Iowa Core Literacy and Social Studies Standards.

- *Mr. Ferris and His Wheel* by Kathryn Gibbs Davis
- *Turning Points in U.S. History: Industrial Revolution* by Veronica B. Wilkins
- *Industrial Revolution* by Debra J. Housel
- *The Man Who Loved Libraries: The Story of Andrew Carnegie* by Andrew Larsen



Text-Dependent Questions

Each book activity instruction sheet also includes three to five text-dependent questions that align with the Iowa Core Literacy and Social Studies Standards. These questions can be integrated throughout the read aloud activity or after the book is completed to offer a point of reflection for students. Some of the questions are more oriented to facilitate a connection between the Goldie’s History Kit theme, Iowa history and/or U.S. history.

Industrial Revolution

4th Grade

Read Aloud Table of Contents

Book: <i>Mr. Ferris and His Wheel</i>	64
Book: <i>Turning Points in U.S. History: Industrial Revolution</i>	65
Book: <i>Industrial Revolution: The 20th Century</i>	66
Book: <i>The Man Who Loved Libraries: The Story of Andrew Carnegie</i>	67

Suggested Read Aloud Tips

Below are listed suggestions of how to prepare for a read aloud activity with the additional historical resources available in this Goldie's History Kit. Educators are welcome to adjust the format to best fit their classroom needs.

Before Read Aloud

- Start by choosing one of the suggested storybooks to read aloud. To assist in your selection, each book is accompanied with a description, reasons for its selection with historical context and relationship to the topic and selected state standards.
- It is recommended that you read the books ahead of time. This allows you to get familiar with the book's content and difficult pronunciations and helps provide context for possible background information to prep students before you begin.
- Read and/or print off text-dependent questions prior to beginning the read aloud. It is up to the educator on whether to use the questions during read aloud or after, but this step allows you to become familiar with the questions and to denote pages within the storybook to use for a particular text-dependent question.
- It is encouraged to introduce the overall topic with a brief explanation. You can use the [background essay](#) and the individual book description to assist in prefacing the book.
- Expressive reading can be effective in keeping students' attention and emphasizing points of the book for retention. Consider using an expressive voice by changing the volume and tone of your reading to reflect different characters or significant events.

During Read Aloud

- Draw attention by pointing to characters or objects in the pictures as you read. It is important to bring attention to topics, events and specific characters you want to connect to the [Read Iowa History lesson plan](#) and the topic, the Industrial Revolution.
- Creating a dialogue with students during read aloud enhances engagement. Text-dependent questions are provided for each book, but educators are encouraged to include their own. Common questions asked to facilitate engagement during read aloud are: "What do you think will happen next?" or "Why would (X) do this? What would you have done if you were (X)?"
- Don't be afraid to follow participants' lead. If students have questions or want to go back, if time allows, try to be receptive to their observations. It may lead to important exchanges about the story that may not be discussed in follow-up questions.

Industrial Revolution

4th Grade

After Read Aloud

- After you have finished reading the book aloud to the class, additional text-dependent questions are an effective way to gauge how much students remember from the book and if they can demonstrate an understanding of the text. Text-dependent questions were designed to reflect the Iowa Core Literacy and Social Studies Standards.
- If students are struggling to answer the text-dependent questions, feel free to go back to the book and re-read passages that could assist in their recollection and application.
- It is critically important that students are able to make connections between the story they heard and how it relates to history in Iowa and around the country.
 - **Example:** As students research about the impact of advanced technological processes during the Industrial Revolution, such as the creation of assembly lines in Part 3, you can include many of the books including in this read aloud portion. For example, in *Mr. Ferris and His Wheel*, because of the innovations of the Industrial Revolution, George Ferris had access to a new material, steel. This allowed him to create a structure that rotated while being both structurally sound and light weight. It also highlights how other inventions contributed to George's creation, such as axles, the steam engine, and light bulbs.
- Educators are welcome and encouraged to use the primary sources (such as the ones found in the Read Iowa History section or online within the Primary Source Sets) or find their own to present to the class. Pass around, hold up or project the images for students to view.
- Ultimately, the purpose of the read aloud wrap-up is to facilitate and evaluate students' comprehension of the subject matter and provide a direct link to history and literacy.

Industrial Revolution Read Aloud Standards

Below are the Iowa Core Literacy and Social Studies Standards that specifically align with the read-aloud activities in the Goldie's History Kit about the Industrial Revolution. If a book title is listed after the description, this signifies that this standard only applies to this book.

Iowa Core Literacy Standards

No.	Description
RL.4.1	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
RL.4.2	Determine a theme of a story, drama, or poem from details in the text; summarize the text.
RL.4.3	Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).
RI.4.1	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
RI.4.2	Determine the main idea of a text and explain how it is supported by key details; summarize the text.
RI.4.3	Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

Iowa Core Social Studies Standards

No.	Description
SS.4.7.	Explain causes of conflict or collaboration among different social groups.
SS.4.10.	Describe how societies have changed in the past and continue to change. (21st century skills)
SS.4.12.	Using historical and/or local examples, explain how competition has influenced the production of goods and services.
SS.4.14.	Explain the reasons why the costs of goods and services rise and fall.
SS.4.20	Compare and contrast events that happened at the same time.
SS.4.23.	Explain probable causes and effects of events and developments.
SS.4.25.	Analyze the impact of technological changes in Iowa, across time and place.

Mr. Ferris and His Wheel

Kathryn Gibbs Davis

Author

2014

Year of Publication

Biography

Book Genre/Type

Book Description

At the 1893 Chicago World's Fair, George Ferris debuted his latest invention. This biography tells the story of how Ferris built the first Ferris wheel. As an engineer, Ferris had great ambitions. He followed his intuition and despite great opposition, he successfully built the world's first rotating attraction. (40 pages)

- [Listen to the digital recording of the book](#)

Why This Book

Due to the innovations of the Industrial Revolution, George Ferris had access to a new material, steel. This allowed him to create a structure that rotated while being both structurally sound and light weight. The book also highlights how other inventions contributed to George's creation, such as axles, the steam engine and light bulbs. In addition to the main narrative, the book contains sidenotes that explain important events and topics, such as what was the World's Fair and how steel is made.

Text-Dependent Questions

- 1 How did the use of metal instead of solid brick allow people to build taller buildings and larger bridges?
- 2 How did other machinery like pumps and axles help George and his crew build the first Ferris wheel?
- 3 Often, when someone tries something new for the first time, other people are sceptical. Originally, why did the people not believe in Ferris' invention?
- 4 What other types of wheels did George look to for inspiration?
- 5 How did Ferris' invention impact future generations?

Turning Points in U.S. History: Industrial Revolution

Veronica B. Wilkins

Author

2020

Year of Publication

Historical Nonfiction

Book Genre/Type

Book Description

This brief introduction to the Industrial Revolution is divided into three parts: changing times, inventions and factories and cities grow. The text identifies leading inventors and their inventions, such as Samuel Slater's textile mill and Eli Whitney's cotton gin. As the story of the Industrial Revolution unfolds, period photos and side-bar facts about the time serve to engage readers. Additional resources include a timeline and glossary. (24 pages)

Why This Book

This book provides a comprehensive approach to the Industrial Revolution. It begins by introducing readers to the origins of the Industrial Revolution. Key inventions are described, such as the steam engine and trains. The role of factories and assembly lines in advancing production is discussed alongside the poor conditions workers endured. Finally, the impact of the Industrial Revolution upon society, then and now, is considered.

Text-Dependent Questions

- 1 How did the invention of the steam engine transform transportation?
- 2 How did machinery, such as textile mills, make work easier and faster?
- 3 An assembly line is a manufacturing process in which the product moves down a line of workers who assemble the same part onto each product instead of having one person assemble all of the parts onto one product. How did this new process improve production in factories?
- 4 As new factories opened up in cities, large numbers of people moved in for work. What was a side effect of such rapid growth in the cities?

Industrial Revolution: The 20th Century

Debra J. Housel

Author

2007

Year of Publication

Informational

Book Genre/Type

Book Description

In the 1700s, the Industrial Revolution originated in Great Britain. Several decades later, it took hold in the United States. As a period of innovation, new industries were introduced, such as manufacturing, coal and steel. Men, women and children moved off farms and into cities to work in large factories. Some investors grew rich quickly off of such industries, while the majority of laborers were taken advantage of by their employers. Due to this period in history, the landscape of Industrialized countries was changed forever. (32 pages)

Why This Book

This book provides an overview of the Industrial Revolution from its origins in the 1700s to its regulation in the early 1900s. Industries discussed in the text include transportation, textiles and coal. Key figures influential during this period are introduced, such as Henry Ford, John D. Rockefeller and Andrew Carnegie. Finally, the ugly underbelly of the Revolution is exposed, such as the mistreatment of workers, child labor, poor working conditions, and inadequate pay. In addition to the main text, each page contains sidebar information and photographs about the topic under examination.

Text-Dependent Questions

- 1 What factors were present in Great Britain that allowed for the Industrial Revolution to originate?
- 2 How did the speed of new machinery impact production of goods?
- 3 How did the Industrial Revolution impact the expansion of the enslavement of people (pg. 9)?
- 4 What is something that was invented during the Industrial Revolution that we still use today?
- 5 What were conditions in the sweatshops like for workers?

The Man Who Loved Libraries: The Story of Andrew Carnegie

Andrew Larsen

Author

2017

Year of Publication

Biography

Book Genre/Type

Book Description

Andrew Carnegie grew up during the height of the Industrial Revolution as a poor immigrant. As an adult, he made his fortune in the steel industry. This book highlights Carnegie's philanthropic work through the development of over 2,500 public libraries. The book concludes with facts about the lasting impact of Carnegie's work. (32 pages)

Why This Book

Through the life of Andrew Carnegie, readers encounter a portrait of a man whose life was impacted in numerous ways by the Industrial Revolution. It begins with his impoverished childhood in Scotland and the family's efforts to immigrate. This demonstrates the impact of new machinery upon skilled craftspeople. Then, readers confront the role of child labor through Carnegie's tireless work in textile mills, as a messenger boy, and for a telegraph company. Finally, the immense fortunes earned by a select few are highlighted through Carnegie's investments in the steel industry. Carnegie's love for books and learning is emphasized throughout the text as the driving factor behind his prosperity and philanthropy.

Text-Dependent Questions

- 1 How did the development of textile mills impact Andrew's father's work as a weaver?
- 2 Andrew was a child worker in a textile factory. Why was Andrew not in school?
- 3 How did Andrew's love for learning help him in life?
- 4 How did the creation of public libraries help to improve local communities?
- 5 Although Andrew Carnegie did much good through his philanthropic work, he was also known for his harsh treatment of factory workers at his steel company. How is Andrew Carnegie's life an example of both the good and the bad that resulted from the Industrial Revolution?

HISTORY MYSTERY

EDUCATOR MATERIALS

Industrial Revolution

HISTORY MYSTERY



4TH GRADE

Goldie's
HISTORY KITS

Industrial Revolution

Introduction

The **History Mystery** activity utilizes historic objects from the State Historical Museum of Iowa's collection to provide students with a unique opportunity to investigate photos of museum artifacts in their own classrooms. Students will work as "history detectives" to figure out the nature of the object, its use and its relationship to the kit theme, the Industrial Revolution. This activity is designed to challenge students to use their skills of deduction, critical thinking and visual literacy to identify the multiple artifacts and understand their connections to Iowa History and the theme of the kit. History Mystery can be used as an independent student activity or in conjunction with the [Read Iowa History lesson plan](#). Educators should explain to students that the goal of the activity is to solve the mystery by searching photos (and possibly videos) for visual clues.

By participating in History Mystery, students will:

- Use problem-solving and critical thinking skills
- Analyze clues to deduce the name and use of objects
- Explore and use background information provided for each object to determine historical significance
- Make real-world connections between the use of the objects and the kit theme, the Industrial Revolution

What's Included

This History Mystery Activity Features

- Photographs of objects
- Background information for each object
- Suggested questions to facilitate students for each object
- History Mystery worksheet

Objects

Each object has photos specifically taken for students to analyze. The photos are printed, laminated and included in the kit. Most objects include multiple photos at different angles, close-ups, etc. to provide different perspectives to help in their detective work. Some objects might include videos. All materials for History Mystery are available on the USB flash drive included in this kit and also in the [Google Drive folder](#).

Questions

Each individual object page in the educator materials packet includes questions to help educators encourage, assist and further engage students as they attempt this activity. Questions are meant to provoke conversation about the object, its relation to the theme of the kit and its connection to Iowa history.

History Mystery Worksheet with Artifact Interpretation Instructions

The History Mystery worksheet includes artifact interpretation questions to assist students in analyzing the objects. The worksheet is easily reproduceable and meant to be distributed to students. It can also be applied to any activity similar to History Mystery, such as having students bring in their own family artifacts.

Industrial Revolution

4th Grade

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Suggested History Mystery Set Up and Implementation

Below are suggestions of how to prepare for and run a History Mystery activity. The first format shows how to integrate the activity with the [Read Iowa History lesson plan](#) (refer to Kit Connections). The second suggested format is using History Mystery as a standalone, group activity. Educators are welcome to adjust the format to best fit their classroom needs.

Type of Activity	Before Activity	During Activity
<p>Kit Connections</p> <p>Using the objects identified with Kit Connections</p>	<ul style="list-style-type: none"> Choose which Kit Connection with a History Mystery object you would like to use. Kit Connections are identifiable by the yellow box and Goldie's icon within the Read Iowa History lesson plan. Have the object pages from this manual available to you with the object descriptions, historical significance and additional questions. Choose the most effective, convenient way to display the object photos (and possibly videos) to the class. If they have not already read it or had it read to them, please read aloud the background essay about the Industrial Revolution. 	<ul style="list-style-type: none"> After displaying the photos or video of the object, it is recommended that students receive one to two minutes to silently analyze the object. After the initial analysis, start a discussion with the students (one to three minutes) to reveal their initial thoughts and analysis of the object. Following this time, pose the questions connected to the object to your students. Remember to connect the objects to the kit topic and the lesson currently in progress.

Industrial Revolution

4th Grade

Type of Activity	Before Activity	During Activity
<p>Group Work</p> <p>Standalone activity with students working together in small groups to investigate objects</p>	<ul style="list-style-type: none"> • Have the object pages from this manual available to you with the object descriptions, historical significance and additional questions. • Separate your students into groups and assign each group a photo of an object from the kit. • Choose the most effective, convenient way to display the object photos (and possibly videos). • Instruct students to use the artifact interpretation worksheet to assist them as they attempt to determine the History Mystery object. • Worksheet Options: Either have the students work together with one worksheet or have each student independently fill in the worksheet and report out from the group. • If they have not already read it or had it read to them, please read aloud the background essay about the Industrial Revolution. 	<ul style="list-style-type: none"> • It is recommended that students receive four to five minutes to analyze the object and fill in the artifact interpretation worksheet. • Ask student groups to present on their objects. As they speak, project the object on the classroom screen. • To encourage classroom discussion and to make connections to the topic, ask all or some of the questions that are associated with each object.

Coal Hod, Shovel and Piece of Coal



Description

This grouping is made up of a metal coal bucket called a hod along with a 16.26 inch shovel. There are two rings formed on the hod's rim with a metallic handle attached to both by its ends. The hod is at its widest at the rim and decreases in width towards the bottom until turning into a slightly wider base. One side of the hod is slanted outward. A piece of coal is also included.

Object Significance

These objects highlight the fuel behind the Industrial Revolution that moved it forward. Coal has been used by humans for thousands of years, but it never became a significant resource until the emergence of large, complex machines in the 18th century. Whether industrial machines were powered directly by coal or steam, coal and the tools needed to store and apply it literally fueled the Industrial Revolution's progress.

Questions about History Mystery Object

- 1 What do you see when you look at this object? What else do you notice?
- 2 How do you think the use of coal during the Industrial Revolution differed from before?
- 3 Why would having a coal hod available be important in ensuring industrial machines maintained power?

Sewing Machine



Description

This sewing machine was manufactured by the Singer Manufacturing Company. The treadle sewing machine is on top of a wooden table attached to a cast iron stand. The manufacturers painted the machine black with gold detailing. The machine includes various holes along it for users to put oil in to lubricate its moving parts. The table includes an extended piece currently folded down and a drawer containing a pin cushion. In addition, a yardstick is nailed down to the table for measurements as well as a cushion draped over the machine with pins. This is a Singer Model 31-15 manufactured on September 20, 1916. The whole machine stands 40 inches by 19 inches with the table extending 47.5 inches and 38 inches while folded.

Object Significance

This sewing machine shows how drastically the means of producing clothing changed before, during and after the Industrial Revolution. For thousands of years, people made their own clothes by hand. Much time, skill, energy and cost went in making clothes. Thanks to machines such as this born out of the Industrial Revolution, individuals could sew fabric to produce clothes at a far faster rate than doing so by hand.

Questions about History Mystery Object

- 1 What do you see when you look at this object? What else do you notice?
- 2 What do you think powered this machine? How do you think this compares to a modern sewing machine?
- 3 Before machines such as this, much of history involves someone working from their home making clothes for their family and others placing small orders. Why and how do you think this changed once machines started to be introduced for mass manufacturing?

Bodice



Description

Listed as a creation of “Madam Schermerhorn of Des Moines, Iowa,” this bodice was made some time between 1906 and 1916 while she worked for Younkers. The bodice consists of multiple fabric parts sewn together. The main part has a V-neck trimmed in brown with a floral pattern braided on. The laced bib and high collar fit into the V-neck area with an unknown, beige-colored material fitted onto the end of the elbow-length sleeves.

Object Significance

This bodice would have been sold by Younkers in one of its stores. Younkers was founded in Keokuk, Iowa, and went on to open many stores across the Midwest. Madam Schermerhorn’s bodice is an example of one of many types of goods Younkers had produced and sold.

Questions about History Mystery Object

- 1 What do you see when you look at this object?
- 2 Who do you think this dress piece was advertised to? How do you think it compares to who could afford dresses in the past or who can today?
- 3 Try to imagine Madam Schermerhorn’s work environment when she was making this bodice? How might it be different from clothing production before the Industrial Revolution?

Keota Glass Works; Eagle Glass Works



Description

This is a pitcher molded from clear, pressed glass with a raised base shaped at the bottom and a spout around the top edge. A molded handle attaches to one side. A “Sheraton” pattern is shaped and styled near the top consisting of a band of scallops and fans. The pitcher stands 9.125 inches by 4.75 inches. While not certain, a glass worker from Eagle Glass Works in Keota, Iowa, made it around 1879-1880 or one from Bryce, Higbee, and Company in Pittsburgh, Pennsylvania around 1885.

Object Significance

This pitcher provides a view, both literal and symbolic, in how the production of glassware was affected by the Industrial Revolution. No matter which company was behind the production of this pitcher, the process of making it by this point in the 19th century. For thousands of years, glass production was kept to small-scale production and creating impure materials. With the emergence of steam-powered machines and rapid advancements in science at this time, both production of goods such as this pitcher began to increase at the same time an increase in quality and clarity.

The Industrial Revolution had an impact on the glass workers, too. Production moved from small-scale production to taking place in factories with many workers. Glass production changed from being a specialized skill to an industrialized one in which many workers could be hired to operate a portion of the production process.

Questions about History Mystery Object

- 1 What do you see when you look at this object? What else do you notice?
- 2 Do you notice any cracks, discoloration or foggy spots on the pitcher? What changed to allow for better quality production?
- 3 An article from the *Keota Eagle* dated September 6, 1879, brags of Eagle Glass Works’ ability to hire workers for cheap compared to unionized factories in the eastern United States. What might this tell you about life for these workers compared to the factory owners or the relationship between workers and owners at Bryce, Higbee, and Company in Pittsburgh, Pennsylvania?

Pottery: Jar with Lid, Bowl and Jug



Description

Henry C. Sweet of Eldora, Iowa, created this jar in 1875. The canning or packing jar is round with a molded rim, inset neck and straight sides. The jar and lid color come from a tan salt-glaze process done during the stoneware production. The words "H.C. Sweet & Co. / Eldora Pottery" are stamped onto the jar below the neck. The jar stands 6.5 inches with a diameter of 5.5 inches and a diameter of 4.5 inches at the top with lid. The lid is round with a central, button-shaped knob. The lid is possibly not the jar's original, but was made in Eldora as well.

Tilden R. Goddard of Muscatine, Iowa, created this stoneware bowl some time between 1892 and 1896. The words "Muscatine Pottery / Muscatine, Iowa" are stamped on the bottom along with the presence of a hairline crack. The bowl measures 11.25 inches by 4.25 inches. A jug molded from stoneware between 1892 and 1906. The jug was glazed by hand using albany slip rather than salt slip. The jug included a top molded into a round rim with a cork inside as well as a small, arch handle on the side. The words "Fort Dodge Stoneware Co. / Fort Dodge, Iowa" are stamped below the rim. The jug is 7.5 inches by 6.25 inches by 6 inches.

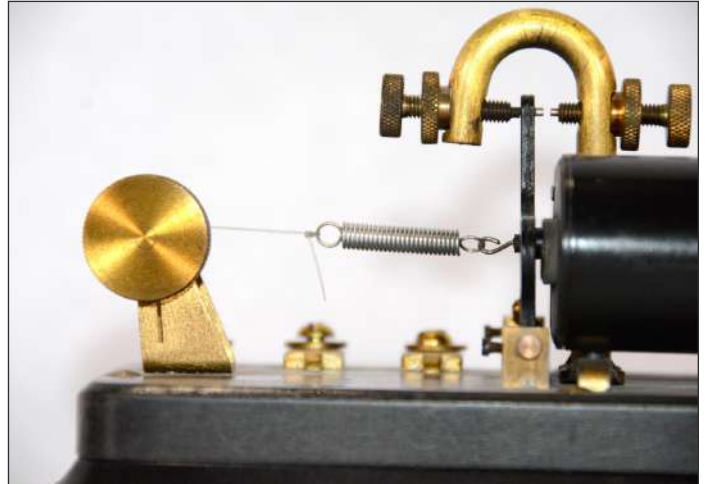
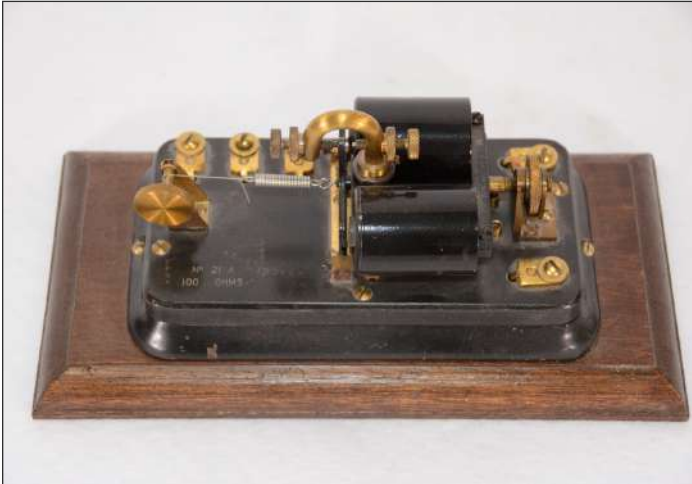
Object Significance

These objects present a timelapse of stoneware pottery in Iowa becoming industrialized like so many industries through the 19th century into the 20th century. Like Sweet and Goddard's work, stoneware used to be a specialized role within a community, similar to having a local blacksmith or doctor. As new machinery and means of factory production started to spread, Iowa pottery creation declined from its peak of 34 in 1885 to just six in 1903. Even so, the jug from the Ford Dodge Stoneware Company displays how the production of ceramics changed from a personal skill to an industrial task around the turn of the 20th century.

Questions about History Mystery Object

- 1 What do you see when you look at this object? What else do you notice?
- 2 At the same time as the number of potters and potteries in Iowa declined, the production of glassware in the United States and availability to Iowans was increasing. What effects do you think this had on the ceramics industry? What makes you think that?
- 3 The stoneware made by individuals often had flaws from being made by hand. Why do you think factory produced stoneware would have fewer imperfections?

Telegraph Relay



Description

This telegraph relay was produced by the Western Electric. The relay's model number is 21A set at 100 Ohms. The relay consists of many different parts. From left to right, the handle with a disc attachment is for adjusting the attached spring; attached to the other end of the spring is a lever called an armature; arching over the armature are the front and back contacts; in the two black cylinders coils are wound around a magnet (creating what is called an electromagnet); and, there is another handle with a disc attachment used to adjust the cylinders' coils. When a telegraph transmitter sent signals, the signal would weaken over a distance. Attached to a battery and the telegraph line, the relay would power up the signal and resend it further along the line by moving the armature back and forth with the spring and magnetism to touch the front and back contacts. Imprinted on the bar attaching the cylinders are the words "Western Electric / Patd July 21, 1903." The relay is 10 inches by 5 inches.

Object Significance

Thanks to relays such as this one, the new, near instantaneous form of communication born from the Industrial Revolution was able to connect communities far from each other like never before. This really set at 100 Ohms could allow communities or businesses to communicate with each other up to 100 miles away. Other relays with higher Ohms could actually expand their coverage up to several hundred miles. Combined with telegraphs, this relay turned communication involved in human activities to go from days, weeks or even months to take just minutes.

Questions about History Mystery Object

- 1 What do you see when you look at this object? What else do you notice?
- 2 How do you think the telegraph and relay affected the reach and possibilities businesses had to communicate across the country or even world?
- 3 With such a rapid change in communication from what was before, like the mail system, how do you think the introduction of the telegraph and relay compare to that of the computer and internet?

Lunch Bucket



Description

This lunch bucket belonged to Carl Coghlan. Coghlan mined at the Pershing Coal Co. mine locations in Marion County, Iowa. The bucket consists of four pieces: a large bucket container, a small bucket container, a dish and a lid. All of the pieces stack onto each other with ridged rings going around certain points of each so they only partly stack into each other. The attached lid is a small metal ring while a large handle with a wooden grip is attached to the large container.

Object Significance

This lunch bucket was significant in ensuring Coghlan had the energy to complete a day's work. Human activity on a day-to-day basis changed in the 19th century with the earliest versions of the light bulb. For much of human history, the limits of human productivity were limited by the sun. With more light, even in a mine, Coghlan and others could find themselves staying awake as well as working longer than ever before. By the early 20th century, the modern lunch meal was developed and this bucket allowed Coghlan to enjoy food during his break.

Questions about History Mystery Object

- 1 What do you see when you look at this object? What else do you notice?
- 2 Imagine working in a coal mine. Why might having a container such as this be important to a miner? What about others working in factories?
- 3 Do people use lunch containers today? How do you think the Industrial Revolution impacted our modern work or school patterns?

Analyze History Mystery Objects

This is an example worksheet that corresponds with the instructions to analyze the objects from History Mystery. This version of the worksheet is for you, the educator, to utilize. A printable version of this worksheet is available in this kit's "Student Materials" packet on the USB flash drive and [Google Drive folder](#).

Analyze an Object

1	1. What does it look like? Think about size, shape and color.	4. Do you see any signs of wear? Does it mean anything about how the object was used?
	2. What is the object made from? Is it one or more materials combined?	5. What year or time period do you think it is from? Why do you think it was from that year?
	3. Is there any writing or details? If yes, what does it tell you about the object?	6. Who is the owner? Write a brief description of the owner.
2	1. What does it look like? Think about size, shape and color.	4. Do you see any signs of wear? Does it mean anything about how the object was used?
	2. What is the object made from? Is it one or more materials combined?	5. What year or time period do you think it is from? Why do you think it was from that year?
	3. Is there any writing or details? If yes, what does it tell you about the object?	6. Who is the owner? Write a brief description of the owner.

Continued on next page.

Analyze History Mystery Objects

3	<p>1. What does it look like? Think about size, shape and color.</p>	<p>4. Do you see any signs of wear? Does it mean anything about how the object was used?</p>
	<p>2. What is the object made from? Is it one or more materials combined?</p>	<p>5. What year or time period do you think it is from? Why do you think it was from that year?</p>
	<p>3. Is there any writing or details? If yes, what does it tell you about the object?</p>	<p>6. Who is the owner? Write a brief description of the owner.</p>
4	<p>1. What does it look like? Think about size, shape and color.</p>	<p>4. Do you see any signs of wear? Does it mean anything about how the object was used?</p>
	<p>2. What is the object made from? Is it one or more materials combined?</p>	<p>5. What year or time period do you think it is from? Why do you think it was from that year?</p>
	<p>3. Is there any writing or details? If yes, what does it tell you about the object?</p>	<p>6. Who is the owner? Write a brief description of the owner.</p>
5	<p>1. What does it look like? Think about size, shape and color.</p>	<p>4. Do you see any signs of wear? Does it mean anything about how the object was used?</p>
	<p>2. What is the object made from? Is it one or more materials combined?</p>	<p>5. What year or time period do you think it is from? Why do you think it was from that year?</p>
	<p>3. Is there any writing or details? If yes, what does it tell you about the object?</p>	<p>6. Who is the owner? Write a brief description of the owner.</p>

THINK LIKE ...

EDUCATOR MATERIALS

Industrial Revolution



4TH GRADE

Industrial Revolution

Introduction

The “Think Like...” activity includes a set of cards to encourage students to think about history through multiple perspectives. The cards feature questions students can use to guide their process of understanding about the Industrial Revolution from individuals with varying interests and priorities. Every kit includes five universal cards (geographer, economist, journalist, economist and political scientist) and two additional cards that specifically highlight individuals connected to the topic (John Frederick Boepple, Edward T. Devine). Each card provides background information about a notable Iowan to provide an Iowa history connection to reference as they work on the questions.

Think Like... Activity Table of Contents

Card: Think Like John Frederick Boepple	85
Card: Think Like Edward T. Devine	86
Card: Think Like a Geographer	87
Card: Think Like an Economist	88
Card: Think Like a Historian	89
Card: Think Like a Political Scientist	90
Card: Think Like a Journalist	91

What’s Included

Think Like... Cards Feature

- Pack of seven cards
- Each card Includes
 - Definition of card description (ex: the job of a geographer)
 - Questions to guide the connection between the card and the topic
 - Brief biography of a notable Iowan in that profession

Questions

The questions with the five universal cards (in every kit) are broad enough that they can relate to any topic, not just the Industrial Revolution. Some cards are more applicable than others to this topic, but each question is open-ended and can push students to think about a topic from multiple perspectives. For instance, thinking about the impact of the Industrial Revolution on Iowa and the United States as an economist or historian may be an easier application than thinking about it from the perspective of a geographer. The Iowan featured on the back of the card is a unique element of these cards that allows students to make local, real-life connections between Iowa history and the kit topic.

Industrial Revolution

4th Grade

Suggested Think Like... Activity Set Up and Implementation

Below are suggestions of how to prepare for and run a Think Like... card activity. The first format shows how to integrate the activity with the [Read Iowa History lesson plan](#) (refer to Kit Connections). The second suggested format is using Think Like... cards as a standalone, group activity. Educators are welcome to adjust the format to best fit their classroom needs.

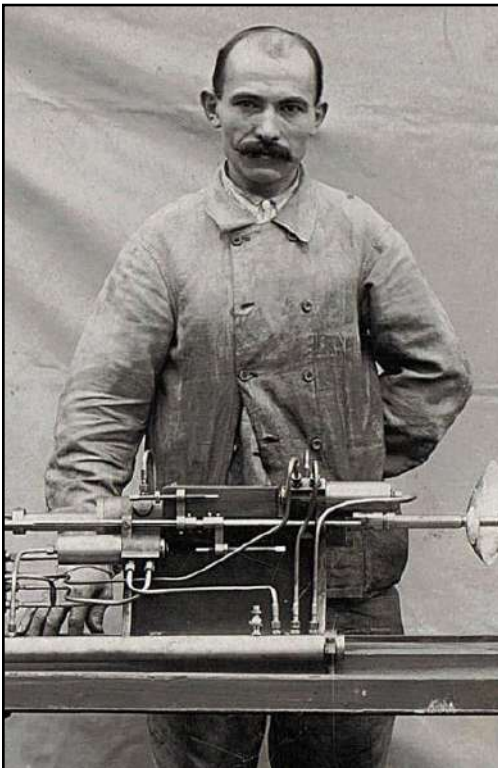
Type of Activity	Before Activity	During Activity
<p>Kit Connections</p> <p>Using the Think Like... cards with Kit Connections</p>	<ul style="list-style-type: none"> Choose which Kit Connection with a Think Like... card you would like to use. If connected to an object or primary source from the kit, have the source images available to you with the source descriptions, historical significance and additional questions (if applicable). Choose the most effective, convenient way to display the Think Like... card questions and the primary source images (if applicable) to the class. If they have not already read it or had it read to them, please read aloud the background essay. 	<ul style="list-style-type: none"> Provide students with a description of the profession they will think like, as well as the biography of the Iowan who had the same career, if appropriate. Provide students with the Think Like... questions and display connected primary source image (if applicable). Pose the Think Like... questions to your students to connect with the source, lesson or topic of the kit. To encourage classroom discussion and to make connections to the topic, ask all or some of the questions, if provided, that are associated with each card or source to the entire class

Type of Activity	Before Activity	During Activity
<p>Group Work</p> <p>Standalone activity with students working together in small groups to use Think Like... Cards</p>	<ul style="list-style-type: none"> Separate your students into groups. Assign each group a different Think Like... card from the kit. Choose the most effective, convenient way to display the card's questions for the groups. The questions on the cards work best when paired with a museum object, a primary source from the kit or directly linked to the topic of the kit. If they have not already read it or had it read to them, please read aloud the background essay. 	<ul style="list-style-type: none"> It is recommended that students receive four to five minutes to read and answer the questions on the Think Like... card. Ask groups to present their answers to the questions. As they speak, project the Think Like... card on the screen. Following their answers, open the discussion to the class for other ideas or answers regarding the questions. Remember to connect the Think Like... questions to the kit topic and the lesson currently in progress.

Think Like... Gertrude Elorza (Durden) Rush Card

Think Like John Frederick Boepple

- John F. Boepple added new technology to his factory. How do you think this impacted the amount of buttons that could be produced? How would it impact the quality?
- Why would Boepple be interested in helping the U.S. government to study propagation, or breeding, of mussels?
- The pearl buttons were made out of mussel shells, which are natural resources. How would overfishing, or catching too many mussels, impact the pearl button business?



John Frederick Boepple (1854–1912)

John F. Boepple was born near Hamburg, Germany, where he learned to make buttons from horn, ocean shell and other materials. However, taxes were raised and put him out of business; he set out to find another location to make pearl buttons. He immigrated to the U.S. After a couple of failed attempts, he found Muscatine's plentiful mussel beds and set up a factory in 1891. As Boepple added more technology, it became apparent that the supply could meet the demand. Muscatine became known as the "Pearl Button Capital of the World." In 1910 Boepple took a position to study the propagation of mussels with the newly established Fairport Biological Station, founded by the U.S. Congress.

Think Like... Edward T. Devine Card

Think Like Edward T. Devine

- Edward T. Devine believed that "...child labor would come to an end in a twelvemonth [one year] if there were no money to be made in the exploitation of child labor." Discuss this statement. What do you think he meant by that?
- The 1924 Child Labor Amendment was passed, but never ratified (it was not added as an amendment to the U.S. Constitution). Discuss reasons why you think this was never ratified.
- The National Child Labor Committee continued its work into the 1990s. Why do you think this was necessary?



Edward T. Devine (1867-1948)

Edward Thomas Devine was born on a farm near Union, Iowa. He earned his Ph.D. in Economics from University of Pennsylvania. It was through his work with economics and his interest in social work that he recognized that children were being exploited and used as cheap labor in factories, mines and other industries. He was part of a group, the National Child Labor Committee (NCLC), that started in 1904. The NCLC had a mission of "promoting the rights, awareness, dignity, well-being and education of children and youth as they relate to work and working." The group focused on fighting for better state and federal legislation. In 1924, the Child Labor Amendment was passed, but never ratified. The amendment is still pending today.

Think Like... a Geographer Card

Think Like a Geographer

A person who studies the environment and how it impacts people.

- Describe details about this location. What do you notice that can help figure out where this place is located? What is unique?
- Why would people move to or leave this place?
- How would people travel to this location? How has traveling to this location changed over time?
- Describe details about people who live here and how they impact the location? How does the location impact the people who live there?



Ira Cook (1821-1902)

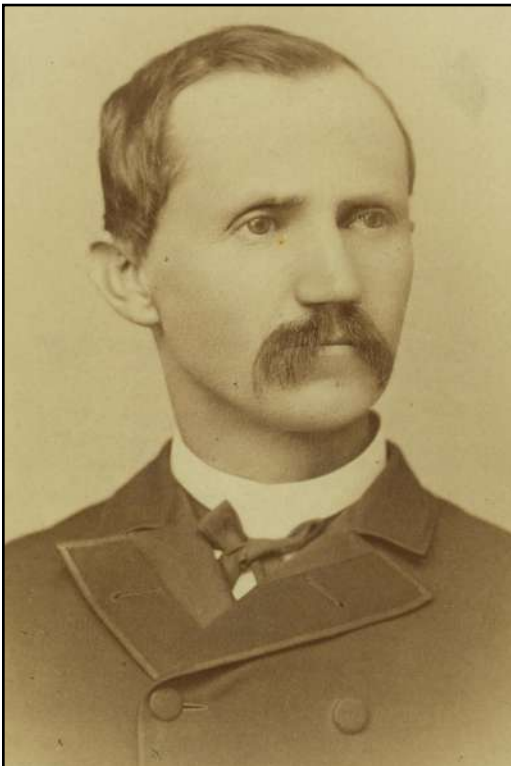
Much like how a geographer studies the land, a land surveyor is someone who measures land areas in order to determine boundaries for settlers to purchase. Ira Cook was one of many Iowans to receive a contract from the government to be a land surveyor when Iowa territory had to be measured. Cook endured tough conditions, long journeys by foot and wagon and harsh weather from 1849-1853 as he crossed the state measuring the land. He was elected mayor of Des Moines, Iowa, in 1861 and later moved to Washington, D.C., to become Deputy United States Revenue Collector in 1864.

Think Like... an Economist Card

Think Like an Economist

A person who studies the ways people make a living.

- Describe the people in relation to the location. What jobs or occupations do you think people had? Why do you say that? How do you think they met their needs and wants?
- How do decisions made by individuals affect themselves and the economy?
- How do decisions made by businesses affect people?
- How do jobs impact people and the economy? Describe what happens when jobs are lost.



Voltaire Twombly (1842-1918)

Voltaire P. Twombly was elected Treasurer of Iowa in January 1885. The treasurer officially oversees the state's revenue and finances. He served three terms in the position before stepping down in 1891. Not only was Twombly financially savvy, he also was a war hero. During the Battle of Fort Donelson during the Civil War, he picked up and carried his regiment's national colors after three other members of his regiment were killed or incapacitated by Confederate fire while attempting to secure the flag. Twombly received a Medal of Honor in 1897 for his heroic deeds during the battle.

Think Like... a Historian Card

Think Like a Historian

A person who explains changes that happened in the past.

- What happened in the past? Why is it important to understand what has happened in the past?
- How did past decisions or actions significantly transform people's lives?
- What has changed or stayed the same over time? Who benefited from the change? Why? Who did not benefit? Why?
- Who or what made changes happen? Who supported the change? Who didn't? Why?



Louise Noun (1908-2002)

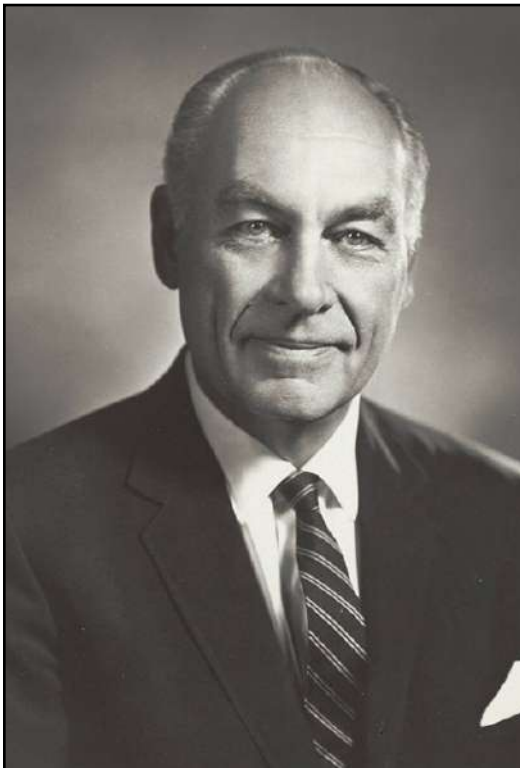
Louise Frankel Rosenfield Noun spent her life preserving and sharing Iowa history. She was born in Des Moines to Meyer Rosenfield, owner of the Younker's department store, and Rose Frankel Rosenfield, a suffrage-supporting mother. Noun and Mary Louise Smith, the former chair of the Republican National Committee, worked together to found the Iowa Women's Archives at the University of Iowa Main Library. The archives include important manuscripts and papers which record women's history in Iowa. Louise Noun also authored numerous books and papers regarding feminist history in Iowa.

Think Like... a Political Scientist Card

Think Like a Political Scientist

A person who studies governments and how they work.

- What problems might people have faced in this society?
- What rights do people have? What rights are people missing?
- What might lead to people being treated fairly? What might lead to people being treated unfairly?
- What information can be gathered about trends at this location or time period that might change or impact the future?



George Gallup (1901-1984)

A native of Jefferson, Iowa, and graduate of the University of Iowa, George Gallup invented the now famous Gallup Poll. The Gallup Poll is a method of survey sampling (asking different people the same question for their answers) to help figure out public opinion. Polls are important for elections and helpful for political scientists. The first instance of using the Gallup Poll for politics was the 1932 campaign of Gallup's mother-in-law, Ola Babcock Miller, who successfully ran for Iowa Secretary of State.

Think Like... a Journalist Card

Think Like a Journalist

A person who tells others about the story.

- What are the major headlines of this historical topic?
- What people would you want to interview? What questions would you ask?
- What details are needed to tell this particular story to people not from this area?
- Why is it important to share news about what is happening at this time period or this location?



George Mills (1906-2003)

There was not a story developing within the Iowa Capitol's hallways or chambers that George Mills did not cover for *The Des Moines Register* newspaper. Mills covered events and political news at the capitol building from 1943-1971 and later served as a reporter for television station WHO-TV. From 1943 to 1954, Mills was also the Iowa correspondent for *Time*, *Life* and *Fortune* magazines, writing Iowa stories for a national audience.

No.	Description	Read Iowa History	Read Aloud	History Mystery	Think Like...
SS.4.1.	Explain how a compelling question represents key ideas in the field.				
SS.4.2.	Use supporting questions to help answer the compelling question in an inquiry.	X			
SS.4.3.	Cite evidence that supports a response to supporting or compelling questions.	X			
SS.4.4.	Construct responses to compelling questions using reasoning, examples, and relevant details.	X			
SS.4.5.	Identify challenges and opportunities when taking action to address problems, including predicting possible results.				
SS.4.6.	Use a range of deliberative and democratic procedures to make decisions about and act on civic problems in their classrooms.				
SS.4.7.	Explain causes of conflict or collaboration among different social groups.		X		
SS.4.8.	Evaluate how civic virtues and democratic principles have guided or do guide governments, societies, and/or communities. (21st century skills)				
SS.4.9.	Explain how the enforcement of a specific ruling or law changed society. (21st century skills)				X
SS.4.10.	Describe how societies have changed in the past and continue to change. (21st century skills)		X	X	
SS.4.11.	Describe how scarcity requires a person to make a choice and identify costs associated with that choice.				
SS.4.12.	Using historical and/or local examples, explain how competition has influenced the production of goods and services.		X	X	
SS.4.13.	Compare and contrast different ways that the government interacts with the economy.				
SS.4.14.	Explain the reasons why the costs of goods and services rise and fall.		X		
SS.4.15.	Identify factors that can influence people's different spending and saving choices. (21st century skills)				
SS.4.16.	Determine the consequences of sharing personal information with others. (21st century skills)				
SS.4.17.	Create a geographic representation to illustrate how the natural resources in an area affect the decisions people make.				
SS.4.18.	Describe how environmental and cultural characteristics influence population distribution in specific places or regions.				
SS.4.19.	Explain influences on the development and decline of different modes of transportation in U.S. regions.				
SS.4.20.	Compare and contrast events that happened at the same time.		X		
SS.4.21.	Analyze conflicting perspectives on historical and current events/issues.				X
SS.4.22.	Infer the purpose of a primary source and from that the intended audience.				
SS.4.23.	Explain probable causes and effects of events and developments.	X	X		
SS.4.24.	Develop a claim about the past and cite evidence to support it.	X			
SS.4.25.	Analyze the impact of technological changes in Iowa, across time and place.	X	X	X	
SS.4.26.	Explain how Iowa's agriculture has changed over time.				

No.	Description	Read Iowa History	Read Aloud	History Mystery	Think Like...
RL.4.1	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.		X		
RL.4.2	Determine a theme of a story, drama, or poem from details in the text; summarize the text.		X		
RL.4.3	Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).		X		
RI.4.1	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	X	X		
RI.4.2	Determine the main idea of a text and explain how it is supported by key details; summarize the text.	X	X		
RI.4.3	Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.	X	X		
RI.4.4	Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.	X			
W.4.1	Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose. b. Provide reasons that are supported by facts and details. c. Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition). d. Provide a concluding statement or section related to the opinion presented.	X			

**Only Iowa Core Literacy Standards applied in the Goldie's History Kit are listed.*

Goldie's History Kit - Industrial Revolution Manual

Book 1: *Mr. Ferris and His Wheel* by Kathryn Gibbs Davis

Book 2: *Turning Points in U.S. History: Industrial Revolution* by Veronica B. Wilkins

Book 3: *Industrial Revolution: The 20th Century* by Debra J. Housel

Book 4: *The Man Who Loved Libraries: The Story of Andrew Carnegie* by Andrew Larsen

History Mystery Object Photos

- Coal Hod, Shovel and Piece of Coal
- Sewing Machine
- Bodice
- Keota Glass Works; Eagle Glass Works
- Pottery: Jar with Lid, Bowl and Jug
- Telegraph Relay
- Lunch Bucket

7 Think Like... Cards

- John Frederick Boepple
- Edward T. Devine
- Ira Cook - Geographer
- Voltaire Twombly - Economist
- Louise Noun - Historian
- George Gallup - Political Scientist
- George Mills - Journalist

USB Flash Drive

- Student Worksheets and Vocabulary Cards
- Read Iowa History Primary Sources
- Photos of History Mystery Objects
- Videos of History Mystery Objects
- Digital Version of Think Like... Cards
- Digital Version of Industrial Revolution Manual

Goldie's History Kit Container