

Lesson Flow (with Abbreviated Lesson Plans): Innovations of the Second Industrial Revolution

<p style="text-align: center;">LESSON 1 [See full lesson plan.]</p> <p><i>Students will be able to:</i></p> <ul style="list-style-type: none"> - Define and connect the <i>2nd Industrial Revolution</i> and the <i>Gilded Age</i> [L6D] - With support, identify the main idea of a timeline infographic and track the development of the ideas presented [R2D, R7D] - Identify and assess design features of timeline infographics [W6C] - Read text accurately, at an appropriate rate, with good expression [RF4C] <p>OPENER: (20 min)</p> <ul style="list-style-type: none"> ● Introduce the unit, briefly defining the 2nd Industrial Revolution and the Gilded Age, and explaining why this is an important era in U.S. history. ● View the video Defining an Era: The Gilded Age [2:32] [Edpuzzle.com version with embedded questions]. ● Debrief the video, discussing the inequities of the era and emphasizing that what drove the boom were new inventions and advances. Explain that this unit will focus on these and that the final project will be for students to create a timeline infographic of inventions and advances from this period. ● Overview lesson objectives and essential questions. <p>DIGITAL LITERACY/COMPREHENSION: (55 min) [R2D, R7D] <i>*Select infographics from the community and local workplaces to use as examples.</i></p> <ul style="list-style-type: none"> ● Briefly show examples of infographics from work and/or the community. Provide guidance on how to attend to their layout and interpret them. ● I DO/WE DO: Model how to interpret and assess the effectiveness of a selection of timeline infographics, using ideas from Guiding Questions: Infographics. ● YOU DO: Students read and assess infographics. ● Discuss: CHECKLIST: Timeline Infographic Project. <p>WORD STUDY: (15 min) [L6D]</p> <ul style="list-style-type: none"> ● Provide formal definitions for the terms <i>2nd Industrial Revolution</i> and the <i>Gilded Age</i>. ● Students complete the Knowledge Rating Scale. <p>FLUENCY: (20 min) [RF4C]</p> <ul style="list-style-type: none"> ● Set up the lesson by explaining that students will read a text that overviews the era. Draw attention to and discuss predictions from the title/illustration. ● Engage students in collaborative oral reading in pairs or triads with Expansion and Reform: Technology of the 1800s (5 levels available) OR in echo or repeated reading of The Gilded Age (GLE 7). <p>EXIT TICKET: (10 min): Two Roses and a Thorn</p>	<p style="text-align: center;">LESSON 2 [See full lesson plan.]</p> <p><i>Students will be able to:</i></p> <ul style="list-style-type: none"> - With support, accurately construct sentences that use content vocabulary [L6D] - Read text accurately, at an appropriate rate, with good expression [RF4C] - With support, take notes on content related to innovations [R2D, W8C] - With support, interpret a timeline infographic [R2D, R7D] <p>OPENER: (5 min)</p> <ul style="list-style-type: none"> ● Review the culminating activity and briefly overview how this lesson will move them forward; address questions from the previous day's Exit Ticket. <p>WORD STUDY: (30 min) [L6D]</p> <ul style="list-style-type: none"> ● Review definitions for the <i>2nd Industrial Revolution</i> and the <i>Gilded Age</i>. ● Hand out TIER 3 Vocabulary: Innovations of the Second Industrial Revolution. Together the class reads the definition and sample sentence for each word and then the teacher prompts students to construct their own sentences, verbally. After a few examples, each student chooses a sentence to write down. <p>FLUENCY: (25 min) [RF4C]</p> <ul style="list-style-type: none"> ● Share the CHECKLIST: Fluency. Model with the intro paragraph for the GLE 5/6 version (below) and have students give feedback. Encourage students to work on reading smoothly and with expression as they read. ● Collaborative oral reading in pairs or triads with: <ul style="list-style-type: none"> ○ Making Things Better: Margaret E. Knight and the Paper Bag (GLE 5/6) ○ Margaret Knight (GLE 8) <p>COMPREHENSION: (50 min) [R7D, R2D, W8C]</p> <ul style="list-style-type: none"> ● Debrief the fluency reading, asking students what most interested/concerned them, etc.. Draw attention to the challenges Margaret Knight faced as a woman, the societal forces at work, and how she overcame those. ● I DO/WE DO: <ul style="list-style-type: none"> ○ Model taking notes on the Notetaking Form for the flat-bottomed paper bag, increasingly involving students, who make notes on their own form. ○ Model an oral summary, using the info in columns. ● Display a timeline from the Sample Timelines with Questions. Discuss the questions and then have students decide where the invention of the flat-bottomed paper bag would go. <p>EXIT TICKET: (10 min): <i>Write and answer 2 questions that can be answered from the timeline.</i></p>
LESSON 3	LESSON 4

Students will be able to:

- With support, accurately construct sentences that use academic (Tier 2) vocabulary [L6D]
- Read text accurately, at an appropriate rate, with good expression [RF4C]
- Take notes on content related to innovations [R2D]
- Interpret a timeline [R7D, R2D]

OPENER: (10 min)

- With student input, review the culminating project and previous key content, using unit vocabulary. Briefly overview the lesson objectives.

WORD STUDY: (20 min) [L6D]

- Briefly review the **Tier 3** vocabulary from the previous lesson.
- Use [Tier 2: Quadrant Chart](#) (TEACHER) to introduce the 1st 5 **Tier 2** words.
 - Provide each word's definition, the part of speech, synonyms, and a model sentence. Students copy the information onto the [Quadrant Chart \(BLANK\)](#) or onto note cards to be made into flashcard rings.
 - Introduce a verbal prompt that requires verbal responses that use the word.

FLUENCY: (20) [RF4C]

- Collaborative oral reading, audio-assisted reading, or repeated reading with:
 - [Inventors and Scientists: Granville T. Woods](#) (Newsela offers 5 different levels.)

COMPREHENSION/WRITING: (60 min) [R7D, R2D]

- Discuss the fluency text, especially similarities between experiences Margaret Knight and Granville T. Woods experienced (e.g., having to sue).
- **YOU DO (in small groups/pairs but with own form):** Review the notetaking process introduced in Lesson 2 and have students work in their fluency groups to take notes on their text, using the [Notetaking Form](#). Afterwards, groups compare info and fill in gaps.
- Have small groups compose an oral summary using the *who, what, where, why, when* info from the form.
- Display a timeline from the [Sample Timelines with Questions](#). Discuss the questions and then have students decide where Woods' invention would go.

EXIT TICKET: (10 min)

- Either verbally, with a show of hands, or on Google Survey, ask students their overall feeling about the new skill of notetaking. Is it **EASY, CHALLENGING**, or **DIFFICULT**? Ask them to elaborate.

Students will be able to:

- Apply notetaking skills to video/media content [SL2C]
- Read text accurately, at an appropriate rate, with good expression [RF4C]
- Apply academic (Tier 2) vocabulary correctly in reading and writing [L6D]

OPENER: (10 min)

- With student input, review the culminating project and previous key content, using unit vocabulary. Briefly overview the lesson objectives.

SPEAKING/LISTENING: (60 min) [SL2C]

- Make the point that the same notetaking process students used with a written text in the previous lesson can be used when listening to a speaker or viewing a video. Discuss differences (e.g., hard to keep up with videos/speakers so need to abbreviate; w/ videos, may need to pause to make notes).
- **I DO/WE DO:**
 - Model with a short clip from the beginning of the video, using the [Notetaking Form](#).
 - [VIDEO: The New Technology and Inventions of The Gilded Age](#) [Edpuzzle.com version with embedded questions]
 - Point out that not all columns of the notetaking form will be filled; just capture what is shared.
- **YOU DO:** Students take notes on the rest of the video. (If possible, students should watch the video on their own, so they can go at their own pace. OR, the teacher can stop the video at times for students to process and write, have students use a partially completed notetaking form, and/or assign different sections of the videos to different groups, using a Google Doc.
- Debrief the video content, with students referring to their notes and filling in gaps.

FLUENCY: (30 min) [RF4C]

- Collaborative oral reading, audio-assisted reading, or repeated reading with:
 - [Inventors and Scientists: Thomas Edison](#) (Newsela offers 5 different levels.)
 - Alternative text: [Edison's Failed Inventions](#) (GLE 7; Readworks.com)
- Give students time to add any info they want from their reading to their [Notetaking Form](#).

WORD STUDY: (20 min) [L6D]

- Practice with Tier 2 vocab: [Fill in the Blank & Sentence Completion](#) (Google Forms version) / [Answer Key](#)

EXIT TICKET:

- Responses to Word Study lesson.

LESSON 5

Students will be able to:

- Read text accurately, at an appropriate rate, and with good expression [RF4C]
- Take notes on content read related to innovations [R2D, W8D]
- With support, write a summary of a section of text [R2D, W2C]
- Identify the *-ion* suffix, pronounce multisyllabic words that use it, and apply its meaning [RF3C, L6D]

OPENER: (10 min)

- With student input, review the culminating project and previous key content, using unit vocabulary. Briefly overview the lesson objectives.

FLUENCY: (20 min) [RF4C]

- [Colors of Innovation: A history of African American Inventors](#) (Newsela has this article at 5 levels.)
 - Read through to the end of the section on Madame Walker. Consider splitting up the sections among students and afterwards having them share what each learned from their sections.

COMPREHENSION/WRITING: (65 min) [R2D, W2C]

- Allow time for students to take notes on their [Notetaking Form](#) for the [Colors of Innovation](#) article, adding innovations/innovators of their choosing.
- Remind students how previously they've used the *Who? What? Where? When? Why? How?* columns of the [Notetaking Form](#) to create an **oral summary**. Today they'll be creating **written summaries**. Ask: *In what circumstances do adults need to write written summaries? (e.g., research for work; to summarize something they read or heard for a social media post; in school/training, to help remember).*
- **I DO/WE DO:** Explain that students will learn how to write a summary of a section from one source, before learning how to combine info from multiple sources. Using a pre-selected section from today's fluency text, model how to **write a summary** of it, with increasing input from students (who are copying the paragraph). Emphasize using a good topic sentence, adding details from the [Notetaking Form](#), using the unit vocabulary, and writing a concluding sentence.

WORD STUDY: (25 min) [L6D, RF3C]

- [Follow the directions](#) for the [-ION Jamboard Exercises](#) (or a similar set of activities using cards or words on board) to help students to see patterns.

EXIT TICKET: (10 min): [3-2-1](#)

LESSON 6

Students will be able to:

- Take notes on content independently read, related to innovations [R2D, W8D]
- Write a summary of a section of text [R2D, W2C]
- Utilize Tier 2 & 3 vocabulary when writing [L6D]
- Identify the *-ion* suffix, pronounce multisyllabic words that use it, and apply its meaning [RF3C, L6D]

OPENER: (10 min)

- With student input, review the culminating project and previous key content, using unit vocabulary. Briefly overview the lesson objectives.

INDEPENDENT READING/NOTETAKING: (30 min) [RF4C]

- Students research new innovations and/or fill in gaps for ones they already know they want to include on their timelines. Provide a [range of texts](#), or focus on sources that cover multiple innovations, e.g.:
 - [A New Industrial Age](#) - pp. 230-240 (GLE 8)
 - [An Industrial Nation](#) - pp. 574-578 only (GLE 8)
 - VIDEO: [Inventions \(PowToon\)](#)Model how to scan headings and key words to find specific sections of the longer text to read.

COMPREHENSION/WRITING: (40 min) [R2C, W2C]

- Remind students how the class previously worked together to write a summary from the [Notetaking Form](#). Explain that they're working on compiling info from just one source before learning how to write a paragraph that draws from multiple sources.
- **YOU DO:** Have students **write their own summary of their notes related to an innovation of their choosing**, either individually or in pairs. Emphasize using a good topic sentence, adding details from the [Notetaking Form](#), using the unit vocabulary, and writing a concluding sentence.
- Debrief by reading aloud and praising specific elements of one or two students' paragraphs or parts of a paragraph (selected while monitoring).

WORD STUDY: (25 min) [RF3C]

- Use the [Suffix -TION Google Slides](#) to review the suffix *-ion*. Practice is embedded in the slideshow. Begin by modeling the activity, then allow the students to do some guided practice and then finish independently.

EXIT TICKET:

- Students submit their paragraphs. Review and incorporate observations into the next lesson.

LESSON 7

Students will be able to:

- Sequence events on a timeline, using notes from different sources [R7D, W8D]
- Use an online platform to design a timeline infographic [W6C]
- Utilize Tier 2 and Tier 3 words appropriately when writing [L6D]
- Apply the *-tion* suffix correctly when spelling [RF3C]

**Use the [Infographic Resource List](#) to decide ahead of time which platform and associated template(s) students will work with.*

OPENER: (5 min)

- Review the culminating activity and briefly overview how this lesson will move them forward.

COMPREHENSION: (30 min) [R7D, W8D]

- Remind students that the culminating project involves creating a **timeline infographic** and that a timeline is a graphic organizer that puts events in chronological order.
- Using their completed [Notetaking Form](#), students select 5 innovations (based on whatever criteria they choose) and put them in the correct chronological order on the [Timeline Template / PDF](#), with the name of the inventor, the date and year it was invented, why and by whom, and at least one impact.
- Lead a class discussion as to whether or not their notes were helpful, compared to sifting through lots of different sources, and any changes they might want to make to their process.
- Remind students that they will choose one of those innovations to write about in the next lesson, but the focus for today will be on creating the timeline infographic.

DIGITAL LITERACY (60 min) [W6C]

- Demonstrate how to use the platform (e.g., from [Visme](#), [Genial.ly](#)) to create a **timeline infographic**.
- Students begin transferring relevant information from the [Timeline Template / PDF](#) to the digital timeline, adding details/images and incorporating elements identified from looking at other timelines.

Word Study can be replaced with more notetaking time, if needed, prior to the creation of the timeline.

WORD STUDY: (20 min) [RF3C or L6C]

- [Words Ending in -TION worksheet](#) OR [Jamboard Concept Sort: Transportation, Communication, Manufacturing / Directions/Answers](#)

EXIT TICKET: (5 min):

- **Muddiest Point:** *What do you find unclear about how to make your timeline infographic?*

LESSON 8

Students will be able to:

- Use a graphic organizer to compile and organize information from different sources [W5C, W8D]
- Integrate information from at least 2 sources to draft a well-structured explanatory paragraph [W2C, W5C, W8D]
- Use an online platform to design a timeline infographic [W6C]
- Utilize Tier 2 and Tier 3 words appropriately when writing [L6D]
- Read text accurately, at an appropriate rate, and with good expression [RF4C]

OPENER: (5 min)

- Review the culminating activity and briefly overview how this lesson will move them forward.

COMPREHENSION/WRITING: (75 min) [W2C, W5C, W8D, L6D]

- Students choose which innovation they feel is the #1 innovation of this time period, using their own criteria.
- Make the connection to the article section summaries students wrote earlier, pointing out that authors often compile info from a number of sources to create their text. Students will be doing the same thing today: **bringing together information from at least 2 sources.**
- Introduce the [CHECKLIST: Explanatory Paragraph](#).
- **I DO/YOU DO:** Explain/review that the first step for an author in the writing process is to get organized. Model how to use the info on the [Notetaking Form](#) to complete a [Pre-Writing Web](#) and have them complete their own. Be sure they add each new source they use to the SOURCE section on the Pre-Writing Web.
- **I DO/YOU DO:** Model how to use their completed [Pre-Writing Web](#) to **write the 1st draft** of an **explanatory paragraph** for their #1 innovation. Students write their 1st draft, using their Pre-Writing Web and incorporating unit vocabulary.

DIGITAL LITERACY: (20 min) [W6C]

- Respond to any issues with creating the timeline infographic that surfaced with the previous lesson.
- Students continue to work on the timeline infographics.

FLUENCY: (15 min) [RF4C]

- Remind students that the 2nd Industrial Revolution goes hand in hand with the Gilded Age, an era when the innovations they have been reading about spurred industrialization. Workers worked long hours and had few protections, a situation that led to a national Labor Day, one of the great innovations of the era.
- [The History of Labor Day](#) (Newsela provides 5 levels.)

EXIT TICKET: (5 min):

- *What's one thing you learned from the fluency text?*

LESSON 9

Students will be able to:

- Revise writing, using a checklist [W2C, W5C, W8D]
- Utilize Tier 2 and Tier 3 words appropriately when writing [L6D]
- Read text accurately, at an appropriate rate, with good expression [RF4C]

OPENER: (5 min)

- Review with students the culminating activity and what they have accomplished so far. Explain that today they will finish up their **timeline infographics** and the **explanatory paragraphs**.

WRITING/DIGITAL LITERACY: (45 min) [W2C, W5C, L6D]

- **I DO/YOU DO:** Explain that after writing a first draft, effective authors take time to read their writing critically, making sure readers will be able to follow their ideas. Have students use the [CHECKLIST: Explanatory Paragraph](#) to review and revise their writing. Conference with students as they work, pointing out any other necessary edits.
 - NOTE: Additional or revised items should be included for students writing at a higher level than what is depicted on the checklist.
- **YOU DO:** Students make a **2nd draft** (perhaps typing into Google Docs), incorporating their revisions. They'll read from this version when they share during the next lesson.

DIGITAL LITERACY: (45 min) [W6C]

- Students continue to work on their timeline infographics, completing the [CHECKLIST: Timeline Infographic Project](#).
- Students will pose 2 questions to their classmates when they share their timelines in Lesson 10, so they should develop those as well.

FLUENCY: (15 min) [RF4C]

- Remind students that they will be reading their paragraphs as part of their presentation and that they will practice now, using the [CHECKLIST: Fluency](#) as a guide.
- Students read their summaries several times (repeated reading) to a partner, incorporating feedback each time.

EXIT TICKET: (10 min) [L6D]

- Students submit completed [CHECKLIST: Timeline Infographic Project](#).

LESSON 10

Students will be able to:

- Share their timelines with the class (or a small group), speaking at a good volume and at a good pace [SL4]
- Read text accurately, at an appropriate rate, with good expression [RF4C]

OPENER: (5 min)

- Teacher reviews what has occurred during the unit and sets the stage for concluding the unit.

SHARING: (90 min) [SL4, RF4C, L6D]

- Students share their **timeline infographics** with the class or in small groups:
 - incorporating unit vocabulary (Classmates can be encouraged to give a thumbs up each time they hear a unit vocabulary word.)
 - posing 2 questions to their classmates that can be answered from the timeline (and discussing responses)
 - reading aloud their explanatory paragraph for their #1 innovation.
- After their sharing, students self-assess their fluency using the [CHECKLIST: Fluency](#). (Teacher responds later with own comments.)
- Commend students for their work. Emphasize that graphic designers get better with practice, and so will they! They should focus in their reflection on what they did well, what surprised them about what they were able to do, and what they want to be able to do better/more easily in the future.

UNIT REFLECTION:

- Revisit the Essential Questions for the unit and lead a discussion around how students would answer those now.
- Encourage students to use the unit vocabulary as they reflect as a class on the unit, responding to prompts such as: *What are some of your takeaways from this unit—what do you hope to remember? Why? How can you apply what you've learned in your life? What surprised you about yourself in this unit? What advice would you give to someone down the road who would be working on this unit?*
- Invite students complete a [Metacognitive Reflection](#) for the unit, jotting down answers to these questions:
 - What did we do?
 - Why did we do it or why is it important?
 - What did I learn?
 - What questions do I still have about it?