

Fires of 1918 Lesson 2: Catching Fire

Grade Level:

9-12

Subject Areas:

U.S. History, Minnesota History, Social Studies, Technology or Digital Media, Language Arts, Art, and Science.

MN State Standards:

Social Studies Standards

9.3.4.9.1 Analyze the interconnectedness of the environment and human activities (including the use of technology), and the impact of one upon the other.

History Standards

9.4.1.2.1 Pose questions about a topic in history, suggest possible answers and write a thesis; locate and organize primary and secondary sources, analyze sources for credibility and bias; corroborate information across the sources; use sources to support or refute the thesis; and present supported findings.

9.4.3.12.5 Identify major developments in science, medicine, and technology; analyze their benefits and dangers. (A Half Century of Crisis and Achievement: 1900-1950) *For example:* Developments—electricity, automobile, hydrogen bomb, vaccines

English Language Arts Standards

Speaking, Viewing, Listening, and Media Benchmarks

9.9.5.5 and 11.9.5.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

Writing Benchmarks

9.7.2.2-11.7.2.2 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

9.7.8.8 and 11.7.8.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.

Science Standards

9.1.2.1.2 Recognize that risk analysis is used to determine the potential positive and negative consequences of using a new technology or design, including the evaluation of causes and effects of failures. *For example:* Risks and benefits associated with using lithium batteries.

9.3.4.1.2 Explain how human activity and natural processes are altering the hydrosphere, biosphere, lithosphere and atmosphere, including pollution, topography, and climate. *For example:* Active volcanoes and the burning of fossil fuels contribute to the greenhouse effect.

9.4.4.1.2 Describe the social, economic and ecological risks and benefits of changing a natural ecosystem as a result of human activity. *For example:* Changing the temperature or composition of water, air or soil; altering populations and communities, developing artificial ecosystems, or changing the use of land or water.

9.4.4.2.4 Explain how environmental factors and personal decisions, such as water quality, air quality and smoking affect personal and community health.

Materials:

Fires of 1918 DVD and DVD player

Computers/laptops/tablets for students

Objectives:

- Students demonstrate an understanding of the many natural and human factors that contributed to the Fires of 1918.
- Students prepare brochures to present information about the causes of the Fires of 1918 and current practices that can prevent widespread fire.

Procedure:

Day 1: Flammable Materials

- Set up a demonstration in the front of the room to show how natural factors can affect fire.
 - Use four large canning jars for the demonstration. Place the following in the jars:
 - Jar 1: damp moss
 - Jar 2: dry moss
 - Jar 3: green sticks
 - Jar 4: dried sticks
 - Ask students to examine the materials and then write down a prediction about which of the materials would burn the fastest and which would burn the slowest.
 - Have lids for the jars handy, as well as beakers of water, to prevent any accidents with fire.
 - With students safely as a distance, carefully drop a lit match into each of the jars. Have students describe how the materials in each jar are burning.

- Have students describe how this demonstration might relate to fires in natural areas that contain forests and wetlands.
- Ensure that the fire is out in each jar. (10-15 minutes)
- Introduce the *Fires of 1918* documentary as a history of fires that swept across forests, wetlands, and communities in northeastern Minnesota on October 12, 1918. Although the fires lasted for less than 24 hours, they burned over a million acres and affected around 52,000 people. As students watch the first 30 minutes of the documentary, have them listen for information about the natural and human factors that caused these fires. Questions on the study sheet will help them to focus on these factors as they watch. (30-35 minutes)

Day 2: Causes of the Fires of 1918

- Begin by asking students to list some of the factors that helped to cause the spread of fire on October 12, 1918 in northeastern Minnesota. Write each of these factors on the board, under the header “Natural” or “Human-Caused.” (5 minutes)
- Have students watch the rest of the documentary on the Fires of 1918. (30 minutes)
- When the documentary is finished, ask students to list any additional factors that contributed to the fires, and write them on the board.
- Have students pair up, and assign one of the listed factors to each pair. Have each pair write down their thoughts about the following:
 - how the factor came about (for example, how wetlands vegetation became so dry);
 - how the factor contributed to the spread of fire;
 - what could have been done back then to reduce the fire risk from this factor;
 - what is currently done to reduce the fire risk from this factor. (10-15 minutes)

Day 3: Changing Practices to Reduce Fire

- Instruct each pair to use their ideas and research from trusted online sources to design and create a brochure about the factor they examined that helped to cause the spread of the Fires of 1918. This brochure should include:
 - historical information about the factor that they examined;
 - historical images to portray the factor;
 - information about current practices that help to reduce or eliminate fire risk from that factor;
 - images that illustrate these new practices. (45-50 minutes)

Day 4: Discussing Practices to Reduce Fire

- Allow students time to finish their brochures, if necessary. Then have each pair describe the information in their brochure to the rest of the class. (45-50 minutes)

Fires of 1918 Study Questions

- 1. How could trains have caused the fires of October 12, 1918?**
- 2. What weather conditions allowed the fires to spread so quickly?**
- 3. How did the need for natural resources for WWI contribute to the spread of these fires?**
- 4. How did logging practices contribute to the spread of these fires?**
- 5. How did the growth of towns in Minnesota contribute to the spread of these fires?**