

Treacherous Trenches

Author
Grade Level
Duration

Meghan Hauter
High School
3 class periods

National Standards

GEOGRAPHY

Element 4: Human Systems

13. How the forces of cooperation and conflict among people influence the division and control of the Earth's surface.

AZ Standards

ELA

Reading

Integration of Knowledge and Ideas

9-10.RI.9 Analyze seminal/primary documents of historical and literary significance, including how they address related themes and concepts.

Writing

Production and Distribution of Writing

9-10.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

TECHNOLOGY STANDARDS

Strand 1: Creativity and Innovation

Concept 2: Models and Simulations

High School

PO 1. Predict and test the relationships amongst interdependent elements of a digital model, simulation or system.

SCIENCE

Earth and Space

Plus HS+E.E1U3.10 Ask questions, define problems, and evaluate a solution to a complex problem, based on prioritized criteria and tradeoffs, that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.

Arizona Social Science Standards

GEOGRAPHY

The use of geographic representations and tools help individuals understand their world.

HS.G1.1 Use geographic data to explain and analyze relationships between locations of place and regions. Key tools and representations such as maps, remotely sensed and other images, tables, and graphs

HS.G1.2 Use geospatial tools and related technologies to construct relevant geographic data to explain spatial patterns and relationships. Key tools and representations such as Google Earth, story mapping, wayfaring apps, and other geospatial technologies

Examining human population and movement helps individuals understand past, present, and future conditions on Earth's surface.

HS.G3.5 Evaluate the impact of social, political, and economic decisions that have caused conflict or promoted cooperation throughout time.

HISTORY

The development of civilizations, societies, cultures, and innovations have influenced history and continue to impact the modern world.

HS.H1.7 Analyze how technological innovation and trade has affected economic development and transformed societies.

Cycles of conflict and cooperation have shaped relations among people, places, and environments.

HS.H2.1 Explain multiple causes of conflict.

SIOP Elements		
Preparation Adapting content Linking to background Linking to past learning Strategies used	Scaffolding Modeling Guided practice Independent practice Comprehensible input	Grouping Option Whole class Small groups Partners Independent
Integrating Processes Reading Writing Speaking Listening	Application Hands on Meaningful Linked to objectives Promotes engagement	Assessment Individual Group Written Oral

Arizona English Language Proficiency Standards

Stage V

Basic

Reading

Standard 4: The student will demonstrate reading comprehension by:

B-7: making connections to text while reading

B-14: drawing conclusions from information implied or inferred in a literary selection

B-21: applying understanding of content area vocabulary within math, science, and social studies texts

Stage V

Basic

Writing

Standard 5: The student will demonstrate research skills by using a variety of reference materials to complete a variety of writing tasks

B-4: summarizing information, from more than one teacher-provided source, in a written report which includes a topic sentence, at least three supporting sentences.

Overview

Most students see innovations in technology as the latest and greatest computers, phones, and tools that make our lives easier, faster, and/or with more pleasure. However, students should also realize that innovations in technology provide benefits and costs to society.

Purpose

In this lesson students will learn through a historical example some of the hardships that soldiers experienced due to extremely deadly weapons created during WWI (1914-18). They will work together to synthesize information from various primary and secondary sources and draw conclusions about the effectiveness of trench warfare as a military tactic.

Key Vocabulary

stalemate: a situation in which no side is winning

chemical warfare: using poisonous gas to harm the enemy

Western Front: an area of fighting in western Europe where the Germans fought the Allied troops during WWI

trench warfare: a type of combat in which opposing troops fight from long, narrow ditches

Schlieffen Plan: Germany's plan to achieve a quick victory over France

Materials

- Access to technology
- Highlighters
- Posterboard/Chart Paper

Treacherous Trenches

- Markers
- Treacherous Trenches PowerPoint
- Map Analysis Tool with a Geographic Lens
- Doc 1- Trench Diagram
- Doc 2-Trench Aerial Photo
- Concept Web
- Life in the Trenches Articles—Links to Research
- #1 Trench Foot
- #2 Lice
- #3 Trench Rats
- #4 Poison Gases
- #5 Trench Food
- #6 Shellfire in the First World War
- Trench Problem Presentations Chart
- Vocabulary Cards
- Vocabulary Test and Answer Key
- 6 Traits Paragraph Rubric
- Presentation Scoring Guide

Objectives

The student will be able to:

1. describe the conditions of WWI trenches.
2. analyze the effectiveness of trench warfare as a defensive military strategy.
3. explain the consequences of trench warfare in terms of relationships between nations and the balance of power.

Procedures

Prerequisite knowledge: Students have read the information in their textbooks and understand the causes of WWI and the nations involved.

SESSION ONE

Engage:

1. Introduce the lesson by showing slides 1-2 of the Treacherous Trenches PowerPoint.
2. Next have students analyze slides 3-8 about military strategy throughout history. As each slide is displayed, have a student read the definitions of each strategy and then ask students to examine the pictures.
3. Orally or on paper, have students
 - relate the advantages and disadvantages of each strategy.
 - describe why they believe that each tactic was chosen at each particular time in history.

- share their responses with the class.

(Grouping Option: Individual and Whole Group) (Integrated Processes: Writing, Listening)

4. Discuss human ingenuity and the reason people create, slide 9. Student responses can be recorded on the board.

Explore:

5. Show slide 10. Explain to the students that their tasks will be to use various primary and secondary sources to analyze the effectiveness of trench warfare during WWI and complete the three assignments listed on the slide. **(Preparation: Linking to past learning).**
6. Have students partner up. Distribute the Map Analysis Tool with a Geographic Lens and Doc 1- Trench Diagram and Doc 2- Trench Aerial Photo. Show slides 11-12. Have student work with the partner to answer the questions. Students not finished can complete the assignment as homework. **(Group Option: Partners), (Scaffolding: Independent practice) (Assessment: Group)**

SESSION TWO

7. Have students refer to their completed Map Analysis Tool with a Geographic Lens and Doc 1- Trench Diagram. Show slide 12.
 - Why do you think the trenches were constructed in a zigzag pattern?
 - What were some possible advantages/disadvantages in the layout or construction of the trenches?
 - Answers will vary: to confuse the enemy, to provide additional protection in the event that the enemy invades your trench as bullets with a straight path can cause more casualties.
 - Why do you believe there are various parallel lines of trenches?
 - Answers will vary: different trenches had different purposes
8. Have students refer to their completed Map Analysis Tool with a Geographic Lens and Doc 2- Trench Aerial Photo. Show slide 13-14.
 - Solicit responses to the questions on the slides.
 - Answers will vary: the most destruction is concentrated in the bottom left corner

of the photo. Roads were important for transporting supplies to the troops. This area appears to be unused farmland.

9. Show slides 15-18 containing factual information about the trenches. Introduce the vocabulary word: stalemate. **(Scaffolding: Comprehensible Input)**
10. Show slide 19. Now tell students that today they will take on the role of a soldier during WWI. There will be various scenarios presented to them and they will have to make choices. Discuss “no man’s land.” This is the most dangerous area on the frontline between your trench and the enemy trench. It is rough, charred landscape, complete with shell craters and littered with barbed wire and other obstacles. Many men lost their lives when they went “over the top” of the trenches and met heavy machine gun fire.
11. Have students use the QR Code or enter <http://www.warmuseum.ca/overthetop/> into their personal devices. This may involve pairing up students who do not have a device. Students should run the simulation once or twice, trying to advance further each time. Have students experiment with variables and notice outcomes.
12. After several minutes of playing the simulation, have students stop. Show slide 20. Have students follow the directions on the slide. Provide paper Concept Web to those who want to do a non-electronic version. Model doing one or two bubbles. **(Scaffolding: Comprehensible Input, Modeling) (Assessment: Individual)**
13. Closure: Show students slides 21- 23 of WWI and WWII technology and ask students the questions on the slide. Answers will vary: More maneuverable airplanes and tanks will make trenches obsolete as it becomes easier to target/bomb the trenches from the air **(Application: Linked to Objectives)**

SESSION THREE

Explain:

14. Show the 4 Minute video <http://www.history.com/topics/world-war-i/world-war-i-history/videos/life-in-a-trench> meant to spark students interest and give them a visual as to what it must have beek like to fight in the trenches.

15. Review the challenges that students faced when running the trench warfare simulation by looking at the concept web notes.
16. Show slide 26. Group students into six groups Explain that they will be assigned a specific problem that soliders faced in the trenches. They will become an expert in this topic and share out in a brief presentation to the class.
17. Distribute to each group a different reading from the Trench Problem Presentations Chart and a set of Vocabulary Cards.
18. Show slide 27. Distribute three different color highlighters. While reading, students should highlight as follows:
 - Color #1- challenges faced by soliders
 - Color #2- things that can be perceived with the 5 senses
 - Color #3- Methods of overcoming challenges **(Integrating Processes-Reading) (Application: Promotes engagement)**
19. When groups have completed the reading assignment, show slide 28. Group members will create a poster with the following criteria:
 - 5 important facts about life in the trenches in relation to your assigned challenge.
 - a warning sign with a symbol that relates to your assigned challenge.
 - a direct quote from a provided primary source.
 - include any vocabulary words from the Vocabulary Cards on the poster.
 - all group members must have a speaking role.
 - your presentation should be less than 3 minutes.
 - Be prepared to take notes while other groups present information.
20. Share the Presentation Scoring Guide. **(Assessment: Group)**
21. Distribute Trench Problem Presentations Chart. As groups take turns presenting their topics, students will take notes as their peers present. **(Integrating Processes-Listening, Writing)**

Elaborate:

22. Show slide 29, The Heavy Cost of Trench Warfare. Ask students to make three observations from the graphic.

23. Show slide 30. Have students make predictions about the consequences of trench warfare. Answers will vary: Nations may be devastated by the heavy losses and want to seek vengeance, etc. (**Application: Linked to Objectives**)
24. Show slide 31. Tell students that after having looked at multiple primary and secondary sources, it is time to problem solve. Their task is to come up with a battle plan of their own that will avoid deadlock (stalemate). In other words, if you were the general in charge, how would you have conducted the war in order to win quickly and have the least loss of life? (**Integrating Processess: Writing**)

Evaluate:

25. Show slide 32. Distribute the 6 Traits Paragraph Rubric and explain how the traits of ideas, organization and voice will be scored. (**Assessment: Individual**)
26. Any assignments not completed can be homework. If time, show slide 33 and discuss the battle plans.

Assessment

Students will score:

- a 4 or higher on the 6 Traits Writing Rubric in the areas of Ideas, Organization and Voice.
- 80% or higher on completing accurately the 9 bubbles on the Concept Web.
- 80% or higher on completing accurately the Map Analysis Tool with a Geographic Lens.
- 80% or higher in using all three colors of highlighters to find key ideas in the readings.

- 80% or higher on completing accurately the 6 problems on the Trench Problem Presentations Chart.
- 80% or higher on the Presentation Scoring Guide.

Extensions

Smithsonian Magazine: Students can view a slideshow of photographs showing the European landscape today that is still scarred by the trench fighting. Students can write a poem relating the emotions evoked by the photos. <http://www.smithsonianmag.com/arts-culture/europe-landscape-still-scarred-world-war-i-180951430/?no-ist>

Research/Data: Students can create a chart/graph representing the hazards of trench life and the impact on soldiers including casualties. Students can include visuals as well as descriptions and statistics.

Visual Display: Students create the trench system in a visual format (2D or 3D), particularly noting the placement of trenches on the western and eastern fronts.

Sources

Book Source: The War to End All Wars by Russell Freedman

Website for Readings: <http://spartacus-educational.com/>

Simulation
<http://www.warmuseum.ca/overthetop/>

Popplet
<http://popplet.com/>