# Treacherous Trenches

**Author:** Meghan Hauter  
**Grade Level:** High School  
**Duration:** 3 class periods

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**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.
### SIOP Elements

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### Arizona English Language Proficiency Standards

**Grade 9-12**

**Basic**

**Listening and Reading**
Standard 1 By the end of each language proficiency level, an English learner can construct meaning from oral presentations and literary and informational text through grade appropriate listening, reading, and viewing.

B-1: determine the central idea or theme and explain how they are supported by using text evidence.

B-2: recount a text including specific details and information.

B-5: utilize visual information to understand the text.

**Speaking and Writing**
Standard 3 By the end of each language proficiency level, an English learner can speak and write about grade appropriate complex literary and informational texts and topics.

B-1: deliver short oral presentations that include some details to develop a topic.

B-3 compose informational text that include relevant details, concepts, and examples to develop a topic while using appropriate conventions.

B-4: integrate graphics or multimedia when useful.

B-5: use examples of precise language and domain-specific vocabulary within informative texts.

**Standard 4** By the end of each language proficiency level, an English learner can construct grade appropriate oral and written claims and support them with reasoning and evidence.

B-1: construct a claim about a topic or text.

B-2: introduce the claim and provide logically ordered reasons or facts that effectively support the claim.

B-4: provide a concluding statement to an argument.

**Listening, Speaking, Reading, and Writing**
Standard 6 By the end of each language proficiency level, an English learner can participate in grade-appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.

B-1: participate in discussions about familiar topics and texts.

B-2: participate in written exchanges about grade-appropriate topics and texts.

B-5: review information expressed by others and add relevant information and evidence to collaborative oral and written discussions.

B-7: summarize the key points expressed.

**Standard 7** By the end of each language proficiency level, an English learner can conduct research and evaluate and communicate findings to answer questions or solve problems.

B-1: gather information from multiple provided resources to answer questions.

B-2: summarize the main idea using evidence from text or presentations.

B-3: paraphrase observations, information notes with labeled illustrations, diagrams, or other graphics, as appropriate.
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
• 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 Shelling 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
   o relate the advantages and disadvantages of each strategy.
   o describe why they believe that each tactic was chosen at each particular time in history.
   o share their responses with the class.
   (Grouping Option: Independent and Whole class; 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 Doc1- Trench Diagram and Doc 2- Trench Aerial Photo. Show slides 11-12. Have students 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.
   o Why do you think the trenches were constructed in a zigzag pattern?
   o What were some possible advantages/disadvantages in the layout or construction of the trenches?
   o 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 causalities.
   o Why do you believe there are various parallel lines of trenches?
   o 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.
   o Solicit responses to the questions on the slides.
   o 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 been 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:
   o Color #1- challenges faced by soliders
   o Color #2- things that can be perceived with the 5 senses
Treacherous Trenches

- 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, Speaking)

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 Processes: 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, Written)

26. Any assignments not completed can be homework. If time, show slide 33 and discuss the battle plans.

Assessment

ELA and Social Science

The presentations can be scored using the Presentation Scoring Guide. Mastery will be considered a score of 24 points or higher.

The Trench Problem Presentation Chart can be graded for accuracy and completeness. Mastery will be considered a score of 80% or higher.

The Concept Web can be graded for completeness. Mastery will be considered a student using all three colors to find key ideas.

The Vocabulary Test can be given to measure language acquisition. Mastery will be considered a score of 80% or higher.

The Battle Plan essay can be graded using the 6 Traits Paragraph Rubric concentrating on the areas of Idea, Organization, and Voice. Mastery will be a score of 4 or higher in each of these areas.

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
Treacherous Trenches

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/](http://spartacus-educational.com/)
- Simulation [http://www.warmuseum.ca/overthetop/](http://www.warmuseum.ca/overthetop/)