



LEVEL

2

World War I: On foot

from the Esri GeoInquiries™ collection for U.S. History

Target audience – U.S. history learners

Time required – 15 minutes

Activity	Investigate the Italian Western Front through the Battles of the Isonzo region.
Social Studies Standards	C3: D2.His.14.9-12. Analyze multiple and complex causes and effects of events in the past. C3: D2.His.1.9-12. Evaluate how historical events and developments were shaped by unique circumstances of time and place, as well as broader historical contexts.
Learning Outcomes	<ul style="list-style-type: none">• Students will identify the role that physical geography played in battles on the Italian Western Front.
Level 2 GeoInquiry Requirements	<ul style="list-style-type: none">• A free school ArcGIS Online organization account. Instructors or students must be signed in to the account to complete this activity.• Approximately 0.5 credits will be used per person in the completion of this activity as scripted.

Map URL: <http://esriurl.com/historyGeoInquiry9>

? Ask

What was the spatial distribution of the Battles of the Isonzo?

- Click the link above to launch the map.
- In the upper-right corner, click Sign In and use your ArcGIS Online organization credentials to sign in.
- With the Details button underlined, click the button, Show Contents of Map (Content).
- Turn off all layers.
- Turn on two layers, WWI Fronts and Battles of the Isonzo.
- Click the button, Bookmarks. Select Italian Front.
- In the map, click the red star and read the pop-up. Click map image in the marker to enlarge.
- Click the green battle markers. Skim the information in the pop-ups.
- ? How long did these battles on the Italian Western Front occur and how many died? [2.5 years, 1,460,683 soldiers]

! Acquire

How far was the initial push south of the Austro-Hungarian forces?

- Of the 12 battles, four had inconclusive results. Though there was tremendous loss of life, very little ground was gained or lost. You will explore one of the several factors that contributed to this result.
- Click the button, Bookmarks. Select Asiago Offensive.
- Turn on the layer, Offensive Isonzo.
- Click the red A marker and review it.
- Using the Measure tool, measure from the red A marker on the Western Front to the limit of the Austrian advance (dotted red line).
- ? How far is it? [Approximately 9 miles]
- ? How long do you think it would take to walk that distance? [2 hours to 3 hours]

🔍 Explore

What might the Eleventh Battle troop movements have looked like?

- Click the Analysis button. Click Use Proximity. Choose Create Drive-Time Areas. (See Tooltip on page 2.)
- In the Create Drive-Time Areas tool, set the following parameters.
 - 1 From the drop-down list, choose Offensive Isonzo (Points).
 - 2 From the drop-down list, choose Walking Time.
Type 3, and then from the drop-down list, choose Hours.
 - 3 Accept the default choice of Overlap.
 - 4 Leave Use Current Map Extent selected.
Always click Show Credits to ensure acceptable credit usage.
Click Run Analysis.
- ? Did the purple walk time path make it to the dotted red line? [Yes, but not directly or in straight lines.]

Analyze

What factors may have contributed to the effectiveness of the offensive?

- Click Basemap and choose Terrain With Labels.
- ? What information does this basemap provide that you did not have on the original map? *[The basemap provides the physical geography of the land where the troops were fighting and navigating.]*

Act

How did physical geography affect the outcome of the battles?

- ? What can you tell now about the path that the walk-time tool chose? *[The terrain map confirms that the walk time computed a path that accommodated mountains and allowed for traversing only the passes and mountain paths.]*
- Zoom out and examine the Italian Western Front borderline in its entirety.
- ? How did the physical geography affect the battles on the Italian Western Front? *[Though there were several factors, the steep, mountainous terrain hindered the forces on both sides from traversing ground quickly or safely.]*

ADD MAP NOTES

- Click Add and from the drop-down list, choose Add Map Notes.
- Type a name, select a template from the drop-down list, and click Create.
- In the Add Features pane, choose a symbol and click in the map to place it.
- In the pop-up window, add your desired information, and then click Close.

CREATE DRIVE-TIME AREA

- Creates areas that can be reached within a specified drive time, drive distances, walking distances, and so on.
- Add a map note point from which to compute time or distance.
- Result layer name must be unique, so consider adding three initials, school code, and a number after the layer name (example: FileName_REED_ABC1).

Next Steps

Continue using an ArcGIS Online organizational account (www.esri.com/schools) to dig deeper into data using the analysis tools, and save your maps to your account.

THEN TRY THIS...

- Create map notes in other geographic areas to see how walk-time and distances are affected by physical geography on the earth.
- Create a 3D scene and story map illustrating and telling the story of the Battles of the Isonzo or other WWI battles using this or other analysis tools.



TEXT REFERENCES

This GIS map has been cross-referenced to material in sections of chapters from these high school texts.

- *World History by Glencoe — Chapters 2 & 3*
- *World History by Prentice Hall — Chapter 1*
- *World History: Human Journey by Holt — Chapters 1–4*