



LEVEL

2

A Day of Infamy: Strike Zone

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

Target audience – U.S. history learners

Time required – 15 minutes

Activity	Investigate how the Imperial Japanese Navy fleet made its way to Pearl Harbor in preparation for the December 7, 1941, attack.
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 be able to visualize and describe the Imperial fleet departure from Japan to its arrival northwest of Hawaii in preparation for the Pearl Harbor attack.
Level 2 Geolnquiry 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 .001 credits will be used per person in the completion of this activity as scripted.

Map URL: <http://esriurl.com/historyGeoinquiry12>

? Ask

How did the Imperial Japanese fleet position itself leading up to Pearl Harbor?

- Click the link above to launch the map.
- In the upper-right corner, click Sign in. Use your ArcGIS Online organization account to sign in.
- Click the button, Bookmarks. Select Japan/Hawaii.
- With the Details button underlined, click the button, Show Contents of Map (Content).
- Turn on the layers, Japanese Fleet and Pearl Harbor Strike Zone.
- Click the marker northwest of Japan and read the pop-up.
- ? Why did the Japanese fleet sail 700 miles north before leaving for Pearl Harbor? *[To fool American intelligence]*

! Acquire

How long would it take to travel from the Kurile Islands to the strike position?

- ? When did the Japanese fleet leave the South Kurile Islands? *[November 26, 1941]*
- Click on the black circle near Hawaii and read the pop-up..
- ? How many days did it take to get to the strike zone? *[11 days]*
- ? What strategy would you use if you were the Japanese fleet, trying to avoid detection? *[Sail as far north and then sail south, stopping far enough north of Hawaii to avoid radar and maintain radio silence.]*

🔍 Explore

What did the fleet's daily progress across the Pacific look like?

- You will estimate 300 miles per day to create a buffer to approximate the daily progress of the Japanese fleet.
- See the Buffer ToolTip on page 2.
- Click Analysis, expand Use Proximity, and choose Create Buffers.
- In the Create Buffers tool, set the following parameters:
 - ① From the drop-down list, choose 1-Japanese Fleet.
 - ② Copy and paste the buffer sizes as follows: 300 600 900 1200 1500 1800 2100 2400 2700 3000 3300.Always click Show Credits to ensure acceptable credit usage.
Click Run Analysis.

more ►

Analyze

How far away from Pearl Harbor was the Japanese fleet strike zone?

- Measure the distance between the Japanese fleet (black circle) and Pearl Harbor (black marker). (See the Measure ToolTip below.)
- ? How far did the Japanese fleet end up being from Pearl Harbor? [*Approximately 200 miles to 250 miles*]
- Click the black Pearl Harbor marker and review the pop-up.
- ? Does your buffer zone map support the Japanese fleet travel on the map? Why or why not? [*Answers will vary but should note that the buffer zone map showed similar travel distance and strike zone placement.*]
- ? According to the map sources, how did the Japanese fleet avoid detection by American intelligence and forces? [*The Japanese fleet managed to maintain the secrecy of their mission, sailed far enough north across the ocean, and stopped far enough away to avoid being detected.*]

Act

What was the extent of the Japanese occupation?

- Turn on the Japanese Occupation, 1942 layer and make sure that the buffer layer that you created is turned on.
- ? Using the buffer layer and the Measure tool, how much farther were the Dutch East Indies from Japan than the Hawaiian Islands? [*The Dutch East Indies extended another 1,100 miles (or 3,300 + 1,100 total miles) from Japan than the Hawaiian Islands.*]
- Turn on the Post Pearl Harbor Attack layer and zoom out one time so that you can see the entire Pacific Theater.
- ? What general statement would you make about the war in the Pacific and Japan's part in that war? [*Japan had ambitious goals for securing control of countries in the Pacific, and they exercised that control over an area covering over 4,000 miles of ocean.*]

USE THE MEASURE TOOL

- Click Measure, select the Distance button, and from the drop-down list, choose a unit of measurement.
- On the map, click once to start the measurement, click again to change direction, and double-click to stop measuring.
- Hint: Position the area of interest on the map so that it is not obscured by the Measure window.

CREATE BUFFERS

- A buffer is an area that covers a given distance from a point, line, or area feature.
- Result layer name must be unique, so consider adding three initials, school code, and a number before or 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 a story map of the journey from Kurile Island to the Japanese fleet strike zone using Creative Commons imagery and video resources.
- Using map notes, draw in the journey and label the miles on the map.



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*