Tracing a Vanishing Sea

Use several sources to investigate geographic change.

WG.P.2.3.A "Actively engage in asking and answering geographic questions by acquiring, organizing, and analyzing multiple sources of data and information about the world's past and present."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline two details about the past, circle two details about the present, and number three kinds of sources you could compare to explain the change.

What Happened to the Aral Sea?

1. Maps from the 1960s show a broad Aral Sea between Kazakhstan and Uzbekistan. Satellite images from later decades show shorelines retreating, with exposed lakebed where water once stood. The change was not simply a dry spell. During the Soviet era, large irrigation projects diverted water from the Amu Darya and Syr Darya rivers to fields, especially cotton fields. Irrigation records can help locate diversions and track how farming expanded. Together, these sources let researchers ask how changes upstream relate to a changing shoreline. Neither a map nor an image alone explains why the water disappeared.

2. A shoreline is more than a line on a map. As the Aral Sea shrank, many fishing communities lost access to the water, and exposed lakebed became a source of salty, dusty air. Interviews with residents can describe changes in work and daily life that satellite images cannot show. Yet one person's memory cannot measure the sea's total area. Researchers can compare interviews from different towns with maps and satellite images to check where and when changes occurred. They must also note that a former fishing port might experience the retreat differently from a farming area upstream.

3. The story also differs across the region. In 2005, Kazakhstan completed the Kok-Aral Dam, which helped hold water in the northern part of the sea. Later satellite images show a larger North Aral Sea than before the dam, and reports describe fishing returning there. Much of the southern part remains severely reduced. A report that says the Aral Sea recovered leaves out this geographic difference. To test a claim about recovery, compare images from before and after the dam, then check reports from communities on both sides. A source from one town cannot represent the whole basin.

2 ANSWER WITH EVIDENCE

Use the passage

1. What geographic question could you investigate by comparing a 1960s map, later satellite images, and irrigation records?

2. What could a resident interview reveal that a satellite image could not? What could the image help check?

3. A report says, 'The Aral Sea recovered after the dam was built.' How would you use two kinds of sources in the passage to test that claim?

4. Why might an interview from one former fishing port give an incomplete account of change across the Aral Sea region?

3 YOUR TURN

Your own words

Write a new geographic question about how the Aral Sea's changes affected people in different places. Name two sources from the passage you would compare, explain what each could tell you, and identify one limit of your investigation.

ANSWER KEY

Tracing a Vanishing Sea

HIGH SCHOOL · WG.P.2.3.A

PART 1 · READ AND MARK

Underline two details about the past, circle two details about the present, and number three kinds of sources you could compare to explain the change. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What geographic question could you investigate by comparing a 1960s map, later satellite images, and irrigation records?	**How did upstream irrigation diversions relate to the retreat of the Aral Sea's shoreline?**
2	What could a resident interview reveal that a satellite image could not? What could the image help check?	**An interview could describe changes in work or daily life. The image could help check where and when the shoreline retreated.**
3	A report says, 'The Aral Sea recovered after the dam was built.' How would you use two kinds of sources in the passage to test that claim?	**Compare satellite images from before and after the dam to check changes in both the north and south. Check community reports from both areas rather than relying on one town.**
4	Why might an interview from one former fishing port give an incomplete account of change across the Aral Sea region?	**A fishing port may have experienced the retreat differently from an upstream farming area, and one person's memory cannot measure change across the whole sea.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

How did daily life change differently in former fishing ports and upstream farming areas? I would compare interviews from both places to learn how residents describe changes in their work. I would also use irrigation records to locate where water was diverted for farming. These sources would not show how every household was affected.

Accept other geographic questions grounded in the passage if students connect them to two relevant sources and explain a reasonable limitation. For question 3, answers must distinguish northern recovery from the continued reduction in the south.