Shifting Shores

Investigate geographic change by comparing sources across time and place

E.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 each kind of source and what it shows, circle dates and place names, and number two claims that require more than one source to judge.

What Happened to the Aral Sea?

1. Why did the shoreline of the Aral Sea, between Kazakhstan and Uzbekistan, move so far during the last century? A mid-twentieth-century atlas placed the port of Aralsk on the sea's northern edge. Today, Aralsk is no longer on the waterfront. Those two observations suggest a major change, but an atlas alone cannot explain it. To investigate, a geographer would note when each source was made, identify the part of the sea it describes, and ask what other evidence might explain the change. The question is not simply where water went, but why different places experienced different outcomes.

2. Records of Soviet irrigation projects show that, beginning in the 1960s, large amounts of water from the Amu Darya and Syr Darya rivers were diverted to grow crops, especially cotton. Both rivers had supplied the Aral Sea. Satellite observations collected over several decades show the shoreline retreating and the sea dividing into northern and southern parts. Together, these sources support a connection between upstream water use and shrinking water downstream. Yet a satellite view shows where water lies, not who decided to redirect it. Planning records help explain those decisions, while satellite observations help test their geographic effects.

3. A single claim that the Aral Sea is still shrinking can hide an important difference. After Kazakhstan completed the Kok-Aral Dam in 2005, water levels in the North Aral Sea rose, and fishing returned to nearby communities. Much of the South Aral Sea continued to recede. A report from a northern fishing town could accurately describe a recovery, while a satellite report focused on the south could accurately describe loss. To judge either claim, check its date and location. Comparing records from different times and places turns an apparent contradiction into a sharper question about which communities gained water and which did not.

2 ANSWER WITH EVIDENCE

Use the passage

1. What geographic change can you identify by comparing the atlas description with Aralsk's location today? What can those observations not explain?

2. How do irrigation records and satellite observations work together to investigate why the sea shrank? State what each source contributes.

3. Why could a report of rising water and a report of continuing water loss both be accurate? What source details would you check?

4. A headline says, "Fishing returned across the entire Aral Sea." Which passage details make that claim too broad, and what would you ask the writer to specify?

3 YOUR TURN

Your own words

Choose a place you know or have studied, and write a geographic question about how it has changed over time. Name two different kinds of sources you would seek, explain what each could show, and describe how you would compare their evidence.

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PART 1 · READ AND MARK

Underline each kind of source and what it shows, circle dates and place names, and number two claims that require more than one source to judge. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What geographic change can you identify by comparing the atlas description with Aralsk's location today? What can those observations not explain?	**Aralsk was once on the Aral Sea's northern shore but is no longer on the waterfront. Those observations do not explain why the shoreline moved.**
2	How do irrigation records and satellite observations work together to investigate why the sea shrank? State what each source contributes.	**Irrigation records document water diverted from rivers that supplied the sea. Satellite observations show the shoreline retreating over time. Together, they support a connection between upstream water use and the sea's decline.**
3	Why could a report of rising water and a report of continuing water loss both be accurate? What source details would you check?	**Water rose in the North Aral Sea after the dam was completed, while much of the South Aral Sea kept receding. Check each report's date and location.**
4	A headline says, "Fishing returned across the entire Aral Sea." Which passage details make that claim too broad, and what would you ask the writer to specify?	**The passage reports fishing returning to communities near the North Aral Sea, not across the entire sea, and says much of the south continued to recede. Ask which communities and dates the headline describes.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

How did the area around my school change from 2000 to today? I would seek city land-use records from both years to identify where homes, shops, and open spaces were located. I would also interview longtime residents about how they used the area then and how they use it now. I would compare the places residents name with the records for those locations and check whether the records and memories point to the same changes.

Accept responses that connect a specific geographic question to at least two distinct source types and explain how the evidence would be compared. Students should distinguish what a source shows from what they infer.