Living on Deltas

Use geographic evidence to compare opportunities and risks.

8.P.2.3 "Demonstrate a mastery of geographic concepts and the use of geographic tools to understand the impact of geography on the past and present. Answer geographic questions and conduct investigations by acquiring, organizing..."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline two ways land or water helps people, circle three water-related hazards, and write 1 and 2 beside two different geographic tools. Your marks will help you connect the landscape, the evidence, and people's choices.

When Rivers Meet the Sea

1 In Bangladesh, the Ganges and Brahmaputra rivers spread across a delta before reaching the Bay of Bengal. Floods leave sediment that can enrich farmland, and rivers offer routes for boats. Yet high water can damage homes and roads. People have built raised homes and flood shelters. The same landscape offers opportunities and risks.

2 To investigate flood risk, a geographer might compare a satellite image taken during a flood with one taken in a dry month. The images reveal where water spreads. An elevation map adds a different clue: which ground is higher. Neither tool alone explains every choice people make, so interviews with residents could show how families prepare.

3 The table gathers evidence from three river deltas. Rivers shaped each region's low ground, but nearby water brings different problems. In the Netherlands, some land lies below sea level; dikes and barriers help hold back water. In Vietnam's Mekong delta, saltwater can enter waterways and fields, affecting crops and drinking water.

WATER HAZARDS AND RESPONSES IN THREE DELTAS

Delta	Water hazard	Local response
Ganges-Brahmaputra, Bangladesh	River floods and coastal storms	Raised homes and flood shelters
Rhine-Meuse, Netherlands	River floods and North Sea storm surges	Dikes and storm-surge barriers
Mekong, Vietnam	Seasonal floods and saltwater intrusion	Raised roads and freshwater storage

2 ANSWER WITH EVIDENCE

Use the passage

1. How do Bangladesh's rivers create both an opportunity and a challenge for people?

2. How could satellite images and an elevation map work together to help a geographer investigate flood risk?

3. Bangladesh and the Netherlands both face dangerous water. How does the table show a difference in their responses?

4. Why would the Netherlands' storm-surge barriers alone not address every water hazard listed for the Mekong delta?

3 YOUR TURN

Your own words

A new town sits where a river meets the sea. Its school is on slightly higher ground, and its farms are beside the river. In four sentences, recommend where to put a new clinic and how people could reach it during a flood; explain how two geographic tools would help you make those choices.

ANSWER KEY

Living on Deltas

GRADE 8 · 8.P.2.3

PART 1 · READ AND MARK

Underline two ways land or water helps people, circle three water-related hazards, and write 1 and 2 beside two different geographic tools. Your marks will help you connect the landscape, the evidence, and people's choices. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How do Bangladesh's rivers create both an opportunity and a challenge for people?	**Flood sediment can enrich farmland, or rivers can provide boat routes. High water can damage homes and roads.**
2	How could satellite images and an elevation map work together to help a geographer investigate flood risk?	**Images from flood and dry months show where water spreads. An elevation map shows which ground is higher.**
3	Bangladesh and the Netherlands both face dangerous water. How does the table show a difference in their responses?	**Bangladesh uses raised homes and flood shelters; the Netherlands uses dikes and storm-surge barriers.**
4	Why would the Netherlands' storm-surge barriers alone not address every water hazard listed for the Mekong delta?	**The Mekong delta also faces seasonal floods and saltwater intrusion. Raised roads and freshwater storage address needs that storm-surge barriers alone would not meet.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I would put the clinic near the school on higher ground rather than beside the farms. An elevation map could help me check whether that ground is above likely floodwater. Satellite images from wet and dry months could show which roads become covered. I would choose a route that stays open in both images or plan a raised route to the clinic.

Accept other evidence-based comparisons and clinic plans. For Part 3, look for a location, a flood-access plan, and a distinct use for each of two geographic tools.