Hazards on the Map

Use location clues to connect natural hazards with community impacts.

E.8.9B.1 "Research and map various types of natural hazards to determine their impact on society."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Circle each type of natural hazard, underline where it could strike, and box one effect it could have on people or services. Use your marks to plan a hazard map.

Planning for Cedar Inlet

1. Imagine a planning team studying Cedar Inlet, a fictional coastal town. An elevation survey places steep wooded hills on the west side and a low market beside the river in the center. The river runs south through town, then turns east to meet the sea. A harbor and its fishing docks sit on the east coast. The middle school stands on higher ground north of the market. The team compares the survey with rainfall records and reports from past storms. These sources help them mark where hazards could reach people and services.

2. At the eastern harbor, a coastal storm can push seawater onto land. This storm surge could cover docks and close the only road to the harbor, delaying fishing crews and deliveries. Farther inland, long periods of heavy rain can make the river overflow. A river flood would spread across the low central market, damaging shops and spoiling food stored there. Both hazards involve water, but they reach different parts of town. The elevated school north of the market is less exposed to river flooding than the shops below it.

3. Rain creates another danger on the western hills. When soil on a steep slope becomes soaked, it can slide downhill. A landslide could block the west road, keeping hillside residents from reaching the school or a clinic near the market. The team's hazard map would shade the eastern harbor for surge, the low central riverbank for flooding, and the western slopes for landslides. These areas show possible exposure, not a prediction that every building will be damaged. Comparing the zones helps leaders decide where road repairs and emergency plans matter most.

2 ANSWER WITH EVIDENCE

Use the passage

1. Where would you mark the storm surge zone? Name one way a surge there could affect the town.

2. Where would you mark the river flood zone? Why is the school less exposed than the market?

3. On which side of town would you mark the landslide zone? Explain how a landslide there could affect residents.

4. Which two hazard zones could include a blocked travel route? Name the route in each zone.

3 YOUR TURN

Your own words

Draw a simple map of Cedar Inlet with north at the top. Label the river, coast, harbor, market, school, and western hills; mark separate zones for storm surge, river flood, and landslide. Then write two sentences explaining why you placed two zones where you did and how each could affect people or services.

ANSWER KEY

Hazards on the Map

GRADE 8 · E.8.9B.1

PART 1 · READ AND MARK

Circle each type of natural hazard, underline where it could strike, and box one effect it could have on people or services. Use your marks to plan a hazard map. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Where would you mark the storm surge zone? Name one way a surge there could affect the town.	**Mark the eastern harbor. A surge could cover docks or close the harbor road, delaying fishing crews and deliveries.**
2	Where would you mark the river flood zone? Why is the school less exposed than the market?	**Mark the low central market beside the river. The school is on higher ground north of the market.**
3	On which side of town would you mark the landslide zone? Explain how a landslide there could affect residents.	**Mark the western hills. A landslide could block the west road, preventing hillside residents from reaching the school or clinic.**
4	Which two hazard zones could include a blocked travel route? Name the route in each zone.	**The storm surge zone could include the harbor road. The landslide zone could include the west road.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Map features: north arrow up; western hills and landslide zone on the left; river through the center, turning right toward the sea; market and river flood zone beside the central river; school north of the market; eastern coast, harbor, and storm surge zone on the right.
I marked storm surge at the eastern harbor because seawater could cover its docks and delay fishing crews. I marked landslides on the western slopes because soaked soil could block the road used by hillside residents.

Accept maps that preserve the stated relative locations, even if shapes and distances vary. Impacts should match the hazard and the place identified in the passage.