Rainfall Shapes Routes

Read physical-map clues to connect climate, vegetation, and settlement.

6.C.2.2 "Use visual information to describe on a physical map the major climate and vegetation zones, drawing conclusions about their impact on human development."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline two landform clues, circle two rainfall clues, and number the places where the passage explains how climate or plants can affect people's choices.

From the Coast to the Desert

1 Imagine traveling across western Africa from the Atlantic coast toward the Sahara. A physical map can show lowlands, plains, and plateaus. The field notes below pair those map features with rainfall and plant clues. Read them from south to north. Look for changes that could affect where people grow food, move goods, or build homes.

PHYSICAL-MAP FIELD NOTES: WESTERN AFRICA, SOUTH TO NORTH

Region	Physical-map feature	Climate zone	Yearly rain, approx.	Vegetation
Liberia	Atlantic coastal lowlands	Tropical rainforest	2,000 mm	Dense forest and coastal mangroves
Southern Mali	Plains	Tropical savanna	1,100 mm	Tall grass and scattered trees
Central Mali	Sahel plains	Semi-arid steppe	400 mm	Short grass and sparse shrubs
Northern Mali	Sahara plateau	Arid desert	100 mm	Very sparse shrubs

2 In wet tropical areas, trees grow densely. People may clear plots to grow crops, but thick forest can make roads harder to build. In a savanna, grass grows with scattered trees. Its rainy season can support fields, while its dry season can make water storage important. The same route may need different plans in each zone.

3 When rain becomes scarce, farmers may choose crops that need less water. Herders may move animals to find grass. In extremely dry areas, permanent settlements often cluster near dependable water, such as a river or well. Climate shapes these choices, but people can also use roads, trade, and technology to adapt to their surroundings.

2 ANSWER WITH EVIDENCE

Use the passage

1. Compare Liberia's coastal lowlands with southern Mali's plains. How might their rainfall and vegetation create different challenges for building a road?

2. Southern Mali gets more rain than central Mali. Why might people farming on its plains still need to store water?

3. Use central Mali's landform, rainfall, and vegetation clues to explain why some people there might herd animals instead of growing crops that need much water.

4. Which region in the field notes is most likely to have permanent settlements near wells? Use its climate and vegetation as evidence.

3 YOUR TURN

Your own words

Plan a trade route from southern Mali's plains to Liberia's Atlantic coastal lowlands. In four sentences, describe how the climate and vegetation change along the route, choose a place for a rest stop, and explain one way the land or plants could affect travel.

ANSWER KEY

Rainfall Shapes Routes

GRADE 6 · 6.C.2.2

PART 1 · READ AND MARK

Underline two landform clues, circle two rainfall clues, and number the places where the passage explains how climate or plants can affect people's choices. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Compare Liberia's coastal lowlands with southern Mali's plains. How might their rainfall and vegetation create different challenges for building a road?	**Liberia receives more rain and has dense forest, which can make road building harder. Southern Mali has less rain and more open grassland, so thick trees would be less of an obstacle.**
2	Southern Mali gets more rain than central Mali. Why might people farming on its plains still need to store water?	**Southern Mali has a savanna climate with a dry season, so farmers may need stored water when rain is scarce.**
3	Use central Mali's landform, rainfall, and vegetation clues to explain why some people there might herd animals instead of growing crops that need much water.	**Central Mali's Sahel plains receive only about 400 mm of rain a year. Short grass can provide grazing, while the limited rain makes crops that need much water harder to grow.**
4	Which region in the field notes is most likely to have permanent settlements near wells? Use its climate and vegetation as evidence.	**Northern Mali is most likely. Its arid desert climate receives about 100 mm of rain a year, and vegetation is very sparse, so dependable water is important for settlement.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

My route starts on southern Mali's plains, where the savanna has tall grass and scattered trees. It ends in Liberia's wetter coastal lowlands, where dense forest and mangroves grow. I would place a rest stop on the plains before the route enters the forest. The thick trees near the coast could make that part of the road harder to build.

Accept reasonable conclusions supported by the table and passage. Students may choose another rest-stop location if they explain how it helps travelers.