Where Water Flows

Compare freshwater availability in three regions.

6-9.WG.2.12 "Analyze the availability of natural resources in regions throughout the world."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline a freshwater source and circle a challenge to using water in each paragraph. Number the region names from 1 (most naturally available freshwater) to 3 (least).

Water in Three Regions

1. In the Amazon Basin of South America, rain falls in every season, and a huge network of rivers carries freshwater across the forest. This makes water plentiful in the region, but it does not mean every village has safe water at home. Floods can muddy local supplies, and remote settlements may lack pipes or treatment plants. For a farm near a river, the challenge is often managing too much water during floods rather than finding any water at all. Rainfall and usable water are related, but they are not identical.

2. On the Arabian Peninsula, much of the land is desert, and rainfall is low and uneven. Some communities pump groundwater stored beneath the surface. In places, that water filled underground layers during wetter climates long ago and is replaced very slowly today. Pumping it faster than it refills reduces the supply. Coastal cities can turn seawater into drinking water, but this requires energy and equipment. Desalination does not make rainfall or groundwater more abundant. A farmer far from the coast must think carefully about how much groundwater a crop needs.

3. Egypt's Nile Valley is another dry place, but a major river runs through it. Much of the Nile's water comes from rain that falls far upstream, especially in the Ethiopian Highlands. The river brings water across otherwise arid land, so farms can use irrigation near its banks. Farther from the river, water is harder to obtain. A dry year upstream can reduce the flow available downstream. Egypt's water supply therefore depends not just on local weather, but also on rainfall in another region.

2 ANSWER WITH EVIDENCE

Use the passage

1. How does rainfall help explain why freshwater is generally more plentiful in the Amazon Basin than on the Arabian Peninsula?

2. Why can farms near the Nile use river water even though Egypt is dry?

3. Which region faces a risk of using groundwater faster than nature replaces it? Explain why.

4. Compare a water challenge for a farm near an Amazon river with one for a farm far from the Nile in Egypt.

3 YOUR TURN

Your own words

Choose two regions from the passage. In four sentences, propose a different water plan for a small school garden in each region and explain one water fact that supports each plan.

ANSWER KEY

Where Water Flows

GRADES 6-9 · 6-9.WG.2.12

PART 1 · READ AND MARK

Underline a freshwater source and circle a challenge to using water in each paragraph. Number the region names from 1 (most naturally available freshwater) to 3 (least). Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How does rainfall help explain why freshwater is generally more plentiful in the Amazon Basin than on the Arabian Peninsula?	**Rain falls in every season in the Amazon Basin, while rainfall on the Arabian Peninsula is low and uneven.**
2	Why can farms near the Nile use river water even though Egypt is dry?	**Rain falls far upstream, especially in the Ethiopian Highlands, and the Nile carries that water into Egypt.**
3	Which region faces a risk of using groundwater faster than nature replaces it? Explain why.	**The Arabian Peninsula. Some of its groundwater is replaced very slowly, so pumping it faster than it refills reduces the supply.**
4	Compare a water challenge for a farm near an Amazon river with one for a farm far from the Nile in Egypt.	**A farm near an Amazon river may need to manage floodwater. A farm far from the Nile may have trouble obtaining water.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

For a school garden in the Amazon Basin, I would build raised planting beds and small drainage channels. Heavy rain and river floods could soak the roots. On the Arabian Peninsula, I would grow drought-tolerant plants and use drip irrigation rather than sprinklers. Rain is scarce there, and some groundwater is replaced very slowly, so the garden should waste as little water as possible.

For the marking job, the supported order is Amazon Basin, Nile Valley, Arabian Peninsula. Accept different garden plans if each is practical for its region and supported by an accurate water fact from the passage.