



Earth's Systems: Water and Weather

Name: _____

Date: _____

Grade: Grade 5

Part A: Multiple Choice

Circle the best answer for each question.

1. Antarctic ice melts, adding fresh water to salty oceans. Which sphere interaction does this most clearly show?

- A) Cryosphere meltwater changes the hydrosphere's salinity
- B) Atmosphere directly creates new geosphere mountains
- C) Biosphere consumes all of the cryosphere quickly
- D) Sun absorbs ocean water back into space directly

2. A 2-degree temperature rise affects global weather patterns. What is one likely outcome scientists predict?

- A) Hurricanes become weaker and less frequent worldwide
- B) More extreme storms and longer droughts occur
- C) All deserts will turn into rainforests immediately
- D) Snow will fall in tropical regions year-round

3. Bangladesh floods damage farms and homes. Which sphere is most clearly affected when crops are destroyed?

- A) Only the geosphere is affected slightly
- B) Atmosphere alone changes during the floods
- C) Biosphere suffers as plants and people lose food
- D) Cryosphere expands during heavy floods

4. A drought reduces a watershed's water flow. Which prediction makes the most sense based on the water cycle?

- A) Tributaries swell with extra water suddenly
- B) Aquifers automatically refill themselves underground
- C) Ocean levels rise dramatically from drought
- D) Less water reaches rivers and groundwater stores

Part B: Fill in the Blank

Write the correct answer on each line.

1. Warmer air holds more moisture, leading to stronger _____ during storms.
2. Melting glaciers add fresh water that lowers ocean _____ over time.
3. If a watershed loses tree cover, more water runs off as _____ instead of soaking in.
4. Rising sea levels combined with stronger storms produce dangerous storm _____ along coasts.

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Part B: Fill in the Blank

Write the correct answer on each line.

1. Warmer air holds more moisture, leading to stronger rainfall during storms.
2. Melting glaciers add fresh water that lowers ocean salinity over time.
3. If a watershed loses tree cover, more water runs off as runoff instead of soaking in.
4. Rising sea levels combined with stronger storms produce dangerous storm surges along coasts.
5. Scientists use temperature trends to predict future climate patterns across the globe.