

Name: _____ Date: _____

Answer Key: Ocean Water Cycle Surfing for Grade 6

Track a drop of water as it journeys from the salty Indian Ocean through the atmosphere to the peaks of the Himalayas.

1. Which process is primarily responsible for adding salt to the oceans over millions of years?

Answer: B) Chemical weathering of rocks on land

As rain falls on land, it breaks down rocks and carries minerals and salts into rivers, which eventually deposit them into the ocean.

2. Water that evaporates from the ocean leaves its salt content behind.

Answer: A) True

During evaporation, only the water molecules turn into gas; the dissolved salts remain in the ocean, which increases salinity in areas with high evaporation.

3. Plants release water vapor into the atmosphere through a process called _____.

Answer: C) Transpiration

Transpiration is the process where plants absorb water through roots and then give off water vapor through pores in their leaves.

4. What is the main energy source that powers the movement of water through the global water cycle?

Answer: C) The Sun

The Sun provides the thermal energy necessary for evaporation and drives the weather patterns that move moisture around the planet.

5. Cold water is denser than warm water, causing it to sink toward the ocean floor.

Answer: A) True

Temperature significantly affects density; colder molecules are packed closer together, making the water heavier and causing it to sink.

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6. If you were studying the 'Great Ocean Conveyor Belt,' which factor would you find driving deep-sea currents?

Answer: B) Differences in density (thermohaline)

Deep ocean currents are driven by 'thermohaline circulation,' which refers to differences in temperature (thermo) and salt content (haline).

7. When water vapor cools down and turns back into liquid water to form clouds, it is called _____.

Answer: A) Condensation

Condensation occurs when gas cools and loses energy, changing back into a liquid state.

8. Which of these labels describes water soaking into the ground to recharge aquifers?

Answer: C) Infiltration

Infiltration is the process by which water on the ground surface enters the soil and moves into underground rocks or spaces.

9. The _____ is the measure of the amount of dissolved salts in water.

Answer: B) Salinity

Salinity specifically refers to the concentration of salt in a body of water, usually measured in parts per thousand.

10. The Earth's water cycle has a definite starting point in the middle of the Atlantic Ocean.

Answer: B) False

The water cycle is a continuous, closed-loop system with no beginning or end; water is constantly moving and changing states.