

Name \_\_\_\_\_

## The Water Cycle Odyssey: How Long Does It Take?

### Short Answer Key

1. The short-term cycle involves the rapid evaporation of water, formation of clouds, and quick return as precipitation (days to weeks). The long-term cycle includes water stored underground for hundreds to thousands of years before resurfacing (thousands of years).
2. Temperature affects the speed of the water cycle by influencing the rate of evaporation and condensation. Deserts have short cycles due to intense heat, causing rapid evaporation and precipitation.
3. Human activities, such as deforestation and pollution, can disrupt the natural flow of the water cycle. For example, deforestation reduces the amount of water released through transpiration and can lead to changes in local precipitation patterns.
4. Geography plays a role in the duration of the water cycle as coastal areas often have shorter cycles due to proximity to the ocean, while inland areas may experience longer cycles due to distance from large bodies of water.
5. Understanding the timeline of the water cycle is crucial for water resource management, agriculture, and predicting weather patterns, ensuring that regions have access to an adequate and reliable water supply.

