Name _____

The Magical Water Cycle: How It Shapes Our Weather

Short Answer Key

1. Evaporation is the process in which water changes from a liquid state to a gaseous state (water vapor) when heated by the Sun. It plays a crucial role in the water cycle by transferring water from the Earth's surface to the atmosphere.
2. Precipitation patterns can vary due to factors such as geographical location, topography, and proximity to large bodies of water. For example, coastal regions may experience more frequent and consistent rainfall than inland desert areas. This variation is significant because it affects water availability, agriculture, and ecosystems.
3. Clouds play a vital role in the water cycle by forming through condensation and serving as reservoirs for water vapor. They also provide valuable information about upcoming weather conditions, such as rain or storms, based on their type, size, and appearance.
4. The water cycle influences temperature near large bodies of water by moderating temperature fluctuations. Water's slow heat absorption and release lead to milder and more stable temperatures near water sources. Inland areas, farther from water, may experience greater temperature variations.
5. An example of an extreme weather event driven by the energy and moisture provided by the water cycle is a hurricane. Hurricanes form over warm ocean waters and are fueled by the evaporation of seawater, leading to intense rainfall, strong winds, and storm surges.