

Name _____

The Magical Transformation: Why Does Water Evaporate?

Short Answer Key

1. Heat energy provides water molecules with the kinetic energy needed to break their bonds and transition from a liquid to a gaseous state (water vapor).
2. Humidity in the environment affects evaporation by slowing it down. High humidity means the air already contains a significant amount of moisture, making it harder for additional water vapor to enter the air.
3. One example is using a fan to speed up the drying process of wet clothes. The moving air helps carry away water vapor, increasing the rate of evaporation.
4. Wind enhances evaporation by carrying away water vapor molecules from the evaporating surface, allowing more water molecules to escape into the air.
5. At the molecular level, water molecules gain energy from heat, break their bonds with neighboring molecules, and transform into water vapor, becoming individual, freely moving molecules in the air.

