

Name _____

The Marvelous Transformation of Matter

Open-Ended Response Answer Key

1. Understanding the different states of matter and their transitions helps us comprehend natural phenomena, such as weather patterns, cooking, and industrial processes. It allows us to manipulate and control matter for various practical purposes.
2. Sublimation has practical applications in freeze-drying food, preserving historical documents, and making instant cold packs.
3. Temperature affects the rate of evaporation because higher temperatures provide more energy to liquid particles, causing them to escape into the air faster.
4. Pressure plays a crucial role in phase changes. For example, reducing the pressure allows water to boil at a lower temperature, which is why water boils more quickly at higher altitudes due to lower atmospheric pressure.

