

Name \_\_\_\_\_

## The Temperature Tango: Exploring Phase Transitions

### Open-Ended Response Questions

1. Discuss the significance of understanding temperature-dependent phase transitions in cooking and food preparation.
2. Compare and contrast the behaviors of particles in a solid, liquid, and gas during melting and boiling, considering changes in energy and particle movement.
3. Explore the role of pressure alongside temperature in phase transitions and provide an example where both factors interact.
4. Explain how scientists and engineers use knowledge of temperature-dependent phase transitions in various industries, such as materials science and environmental studies.

