

Name \_\_\_\_\_

## Hot or Cold? How Temperature Affects the Speed of Chemical Reactions

### Open-Ended Response Questions

1. Imagine you are a chef creating a new recipe. How would you consider temperature and its impact on chemical reactions to achieve the desired flavors and textures in your dish?
2. Investigate the role of temperature in climate change, focusing on how it influences chemical reactions in the Earth's atmosphere. How can understanding these reactions help mitigate climate change?
3. Reflect on the importance of temperature control in pharmaceutical manufacturing. Provide an example of a medication where temperature plays a critical role in its production.
4. Explore the use of rate equations in scientific research and industrial processes. How do these equations aid in optimizing reaction conditions and improving efficiency?

