

Name \_\_\_\_\_

## Introduction to Simple Machines

### Open-Ended Response Questions

1. Imagine a world without simple machines. How would this impact our daily lives, industries, and technology? Provide examples of tasks that would become more challenging or inefficient.
2. Explore the concept of mechanical advantage in simple machines. Why is it essential for modern technology and industry? Provide specific examples to illustrate its significance.
3. Consider the design and function of a bicycle, which includes several types of simple machines. Explain how each of these simple machines contributes to the bicycle's overall performance and efficiency.
4. Reflect on the historical development of simple machines and their role in shaping human civilization. How have these fundamental tools influenced innovation, exploration, and progress throughout history?

