

Name \_\_\_\_\_

## Friction: The Double-Edged Sword of Everyday Life

### Short Answer Key

1. Example: Friction between shoes and the ground prevents slipping while walking or running.
2. Friction between moving parts generates heat and causes gradual degradation of surfaces, leading to wear and tear.
3. Friction between sports equipment (e.g., shoes, racquets) and playing surfaces allows athletes to maintain control, change direction, and perform specific movements effectively.
4. Engineers might use lubricants in the engine of a car to reduce friction between moving parts, which lowers wear and tear and improves efficiency.
5. Balancing friction is important because it allows us to harness its benefits while minimizing its drawbacks, ensuring safety, efficiency, and the longevity of machines and systems.

