

Name _____

Friction: The Double-Edged Sword of Everyday Life

Open-Ended Response Questions

1. Think of a scenario where friction is essential, and its disadvantages are mitigated effectively. Describe the scenario and how engineers or scientists have achieved this balance.
2. Discuss the role of friction in reducing accidents and injuries in sports and other physical activities. Provide examples of safety equipment or techniques that rely on friction to prevent harm.
3. Imagine you are an engineer working on a project to reduce the wear and tear caused by friction in a manufacturing plant. Describe the steps you would take and the solutions you would propose to minimize this issue.
4. Friction can be both advantageous and disadvantageous in transportation. Provide examples of how engineers have harnessed friction to improve vehicle safety and efficiency, as well as situations where excessive friction has posed challenges in transportation systems.

