

Name _____

Mechanics of a Wedge

Open-Ended Response Questions

1. Imagine a scenario where you need to split a log of wood for a campfire. Explain how you can use an axe, incorporating the mechanics of the wedge, to accomplish this task efficiently.
2. Discuss the significance of the trade-off between force and distance in the design of cutting tools like knives and scissors. How does the wedge shape improve their functionality?
3. Compare and contrast the application of a wedge in a doorstop with its use in securing objects temporarily in construction. What similarities and differences do you observe?
4. Why do you think wedges have been used by humans for centuries, and how have they influenced the development of various tools and objects? Provide historical examples of their use.

