

Name _____

Mechanics of an Inclined Plane

Multiple Choice Questions

1. What is the primary purpose of an inclined plane?
 - a. To change the direction of force
 - b. To increase the force required
 - c. To reduce the force required
 - d. To create a barrier

2. How does the angle of the incline affect the mechanical advantage of an inclined plane?
 - a. A steeper angle increases mechanical advantage.
 - b. A steeper angle decreases mechanical advantage.
 - c. The angle does not affect mechanical advantage.
 - d. Mechanical advantage is calculated differently for steep angles.

3. In a wheelchair ramp, what is the benefit of using an inclined plane?
 - a. It increases the effort needed to move.
 - b. It allows for vertical lifting.
 - c. It reduces the effort needed to move between levels.
 - d. It serves as a barrier to prevent movement.

4. Why do skateboarders use inclined planes, also known as ramps?
 - a. To perform tricks and maneuvers
 - b. To slow down their skateboards
 - c. To make skateboarding more difficult
 - d. To eliminate the need for wheels

5. How does the length of an incline compare to its height in terms of mechanical advantage?
 - a. The length is always shorter than the height.
 - b. The length is always longer than the height.
 - c. The length and height are equal.
 - d. The relationship varies depending on the incline.

