

Name _____

Rolling Through Life: The Marvels of the Wheel and Axle

Multiple Choice Questions

1. What are the two main components of a wheel and axle?
 - a. Handle and blade
 - b. Wheel and pulley
 - c. Circular wheel and cylindrical axle
 - d. Screw and lever

2. How does the size of the wheel compared to the axle affect the mechanical advantage of a wheel and axle?
 - a. A larger wheel relative to a smaller axle provides a greater mechanical advantage.
 - b. A smaller wheel relative to a larger axle provides a greater mechanical advantage.
 - c. It does not affect the mechanical advantage.
 - d. The mechanical advantage is determined by the color of the wheel.

3. What is the role of the axle in a wheel and axle?
 - a. It is the circular part that rotates freely.
 - b. It provides a surface for other objects to move along.
 - c. It serves as a central axis for the wheel to rotate around.
 - d. It has no specific role in a wheel and axle.

4. How do car wheels and axles work together in a vehicle?
 - a. Car wheels transmit power to the engine.
 - b. The engine's power is transmitted to the wheels through the axle, allowing the car to move.
 - c. The axle holds the car's weight while the wheels spin freely.
 - d. The axle controls the direction in which the car moves.

5. What does turning a doorknob demonstrate?
 - a. The principle of leverage
 - b. The use of gears
 - c. The concept of buoyancy
 - d. The operation of a wheel and axle

