

Name \_\_\_\_\_

## Mechanics of a Pulley

### Short Answer Key

1. A fixed pulley remains stationary, changing the direction of the force applied. A movable pulley moves with the load and provides a mechanical advantage by reducing the amount of force needed to lift the load.
2. A block and tackle system uses multiple pulleys, both fixed and movable, to multiply the mechanical advantage, making it easier to lift heavy loads.
3. A fixed pulley could be effectively used to raise a flag on a flagpole.
4. Using a pulley system makes it easier to draw water from a well because you can use less force to lift the bucket of water.
5. A movable pulley might be used to lift a heavy object in a garage when performing car maintenance.

