Name _____

Cracking the Code of Mechanical Advantage: How Force Gets a Boost!

Multiple Choice Questions

1. What is mechanical advantage?

a) A simple machine

b) A secret code

c) A way to reduce the amount of work

d) A principle that helps us use less force to do work

2. Which of the following is NOT a simple machine?

a) Lever

b) Pulley

c) Gear

d) Inclined plane

3. How does a lever make tasks easier?

a) By changing the direction of force

b) By multiplying force

c) By reducing the distance you need to move an object

d) By increasing the force required

4. What does a pulley do to mechanical advantage?

a) Decreases it

b) Increases it

c) Has no effect

d) Changes the direction of force

5. What is the trade-off when using mechanical advantage?

a) You always get more force without any drawbacks.

b) You can choose between distance and force without any trade-offs.

c) Increasing the distance over which you apply force may require moving the object a longer distance.

d) Reducing the force needed doesn't change the distance covered.