

Lesson Check: Forces and Motion

1) How can you determine the speed of a moving train?

- ☐ Divide the distance traveled by the time spent moving.
- ☐ Divide the time spent moving by the direction traveled.
- ☐ Multiply the distance traveled by the time spent moving.
- ☐ Multiply the kinetic energy by the distance traveled.

2) Fill in the blanks using the available answer choices.

An object that is sitting still has _____ forces acting on it.
(Blank 1)

Blank 1 options

- balanced
- unbalanced

3) A boy pushes on a box and moves it across the room. This is an example of _____.

- ☐ balanced forces
- ☐ unbalanced forces
- ☐ potential energy
- ☐ chemical energy

4) Fill in the blanks using the available answer choices.

Objects in motion tend to stay in motion because of the property of _____.
(Blank 1)

Blank 1 options

- inertia
- gravity

5) Dana is the pitcher for her community baseball team. What force causes the baseball to change direction when it is hit by the bat?

- ☐ The catcher's force on the ball with his mitt.
- ☐ The batter's force on the ball as he misses.
- ☐ The pitcher's force on the ball as he throws.
- ☐ The batter's force on the ball with the bat.

6) The distance traveled in an amount of time is called _____.

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7) Fill in the blanks using the available answer choices.

_____ describes when a moving object speeds up.
(Blank 1)

Blank 1 options

- Acceleration
- Velocity

8) If you drop a rock in a lake, the rock will slow down because the water exerts _____.

- ☐ gravity
- ☐ less resistance
- ☐ drag forces
- ☐ velocity

9) What causes heat when rubbing your hands together? _____