

Part 1

1. Read each statement. Write True or False on the line.

- _____ a. Moving objects have kinetic energy.
- _____ b. Mechanical energy can be used to do work.
- _____ c. The faster an object moves, the more potential energy it has.
- _____ d. Wind has kinetic energy.
- _____ e. Energy can be created.

2. Read each statement. Write (P) if it's Potential Energy or (K) if it's Kinetic Energy.

- _____ A car is traveling 45 mph.
- _____ A rock is on a ledge 5 meters high.
- _____ A car is resting at the top of a hill.
- _____ A ball is thrown into the air and is still moving.
- _____ A ball rolling on the ground.

Part 2

Directions: Circle to the answer that is most correct from the reading passage.

1. When does a ball thrown into the air have the *most* potential energy?

- A) before it is thrown
- B) just after it is thrown
- C) at its greatest height
- D) just before it hits the ground

2. Which word has a meaning *closest* to the meaning of the word potential?

- A) large
- B) moving
- C) stored
- D) wasted

3. Which word has a meaning *closest* to the meaning of the word “kinetic” ?

- A) large
- B) moving
- C) stored
- D) wasted

4. In this passage , the word conserved most nearly means

- A) used
- B) saved
- C) wasted
- D) found

5. Circle the answer choice that has more Potential Energy.

- A) A 25 kg mass or a 30 kg mass at the top of a hill?
- B) A car at the top of the hill or the bottom of a hill?
- C) A plane on the ground or a plane in the air?
- D) A full plane or an empty plane (both are flying)?

6. Circle the answer choice that has more Kinetic Energy.

- A) A 25 kg mass or a 30 kg mass going 5 m/s.
- B) Two 10 kg masses, one going 75 m/s, one going 45 m/s.
- C) A car at rest or a car rolling down a hill.
- D) A heavy bike or a light bike.

Short Answer:

Why do you think roller coasters are called “Scream Machines” ?
