

Label each number next to the correct letter on the diagram of the rolling ball.

1. Has the maximum kinetic energy
2. Has the maximum potential energy
3. Has the least potential energy
4. Has the least kinetic energy
5. Just a little more kinetic energy than A
6. Just a little more potential energy than C
7. Just a little less potential energy than F
8. Just a little more kinetic energy than G
9. Just a little less kinetic energy than D
10. Just a little less potential energy than C

PE AND KE MATCHING

1. Which sequence correctly shows an increase in potential energy?

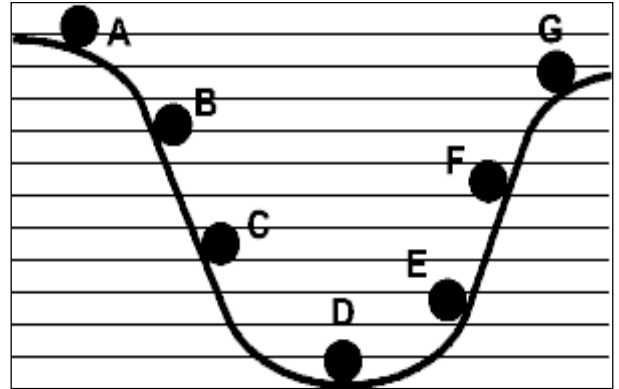
- A. E, F, B, G
 B. B, F, E, C
 C. D, E, B, F
 D. A, G, F, C

2. Which sequence correctly shows an increase in kinetic energy?

- A. E, F, B, G
 B. B, F, E, C
 C. D, E, B, F
 D. A, G, F, C

3. Which sequence correctly shows a decrease in kinetic energy?

- A. E, F, B, G
 B. B, F, E, C
 C. D, E, B, F
 D. A, G, F, C



Part 2: Determine whether the objects in the problems have **kinetic, potential energy or both**.

4. You serve a volleyball with a mass of 2 kg. The ball leaves your hand with a speed of 30 m/s. The ball has _____ energy.

5. A box of pineapples is sitting at the top of a hill that is 21 m high. The box with the pineapples weighs 12 kg. The box has _____ energy.

6. A car is traveling with a velocity of 40 m/s and has a mass of 1120 kg. The car has _____ energy.

7. A cinder block is sitting on a platform 20 m high. It weighs 79 kg. The block has _____ energy.

8. There is a bell ringing at the top of a tower that is 45 m high. The bell weighs 190 N. The bell has _____ energy.

9. A roller coaster is at the top of a 72 m hill moving at 50 m/s and weighs 966 N. The coaster (at this moment) has _____ energy.