

Law of Conservation of Energy

Total questions: 22

Worksheet time: 31mins

1. Energy can be created.
 - a) True
 - b) False
2. Energy cannot be destroyed.
 - a) True
 - b) False
3. When something is dropped, what type of energy transfer takes place?
 - a) Kinetic -> Potential
 - b) Gravitational Potential -> Kinetic -> Sound
 - c) Electrical -> Chemical
 - d) Heat -> Nuclear
4. Imagine dropping a basketball. When would it have the most gravitational potential energy?
 - a) When it is closest to the ground
 - b) When it is at the highest point
 - c) When it is halfway down
 - d) It has the same amount of gravitational PE at all points
5. Food has _____ potential energy that our bodies transform into kinetic energy.
 - a) Elastic
 - b) Nuclear
 - c) Gravitational
 - d) Chemical
6. Energy is the ability _____.
 - a) to do work
 - b) to power things
 - c) to move objects
 - d) to turn on a light
7. According to the Law of Conservation of energy, the amount of energy before and after a reaction must be the same. Which statement below is true?
 - a) The total amount of energy is conserved
 - b) The total amount of energy is less after a reaction
 - c) The total amount of energy is more after a reaction

8. The Law of Conservation of Energy states:
- a) Energy can created or destroyed but not transformed
 - b) Energy cannot be created or destroyed, it can only transformed
 - c) Energy can't be created, destroyed or transformed
9. Potential or kinetic?
Stretched bow and arrow?
- a) kinetic
 - b) potential
10. Potential or kinetic?
Running?
- a) potential
 - b) kinetic
11. **What are the two factors influence kinetic energy?**
- a) mass and weight
 - b) Speed and weight
 - c) speed and mass
 - d) particles and objects
12. Energy is the ability to do____?
- a) to do work
 - b) to move object
 - c) to turn on a light
 - d) to power things
13. The faster an object moves, the _____ kinetic energy it has.
- a) more
 - b) less
 - c) all of the above
 - d) none of the above
14. _____ is stored energy
- a) Potential
 - b) Kinetic
 - c) none of the above
 - d) all of the above
15. **Which type of energy is converted when fireworks release heat, light, and sound?**
- a) kinetic energy
 - b) elastic potential energy
 - c) chemical potential energy
 - d) electromagnetic energy

16. **As height increases, so does...**

- a) Thermal energy
- b) Mechanical energy
- c) Kinetic energy
- d) Potential energy

17. **Gravitational potential energy depends on...**

- a) Height
- b) Speed
- c) Light
- d) Time

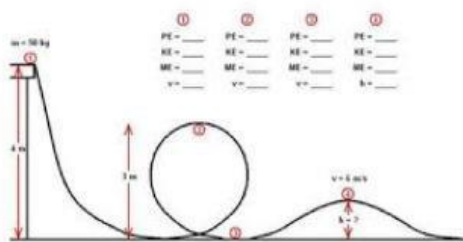
18. **An object that has kinetic energy must be...**

- a) lifted above earth's surface.
- b) in motion
- c) at rest
- d) none of the above

19. **This is the type of energy stored in a battery.**

- a) Gravitational energy
- b) Elastic energy
- c) Nuclear energy
- d) Chemical energy

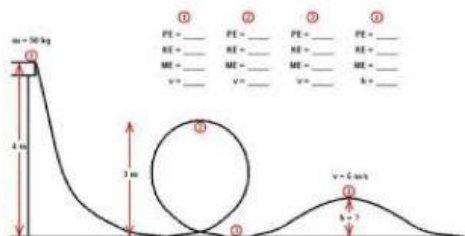
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At which point would this roller coaster possess the greatest amount of potential energy?

- a) 1
- b) 2
- c) 3
- d) 4

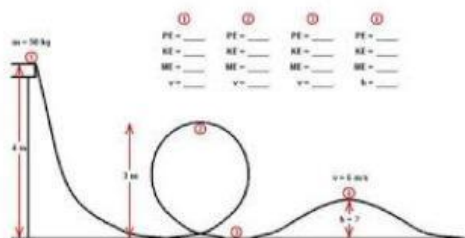
21.



At which point would this roller coaster possess the most kinetic energy?

- a) 1
- b) 2
- c) 3
- d) 4

22.



At which point on this roller coaster would the amount of total energy equal the amount of potential energy?

- a) 1
- b) 2
- c) 3
- d) 4