

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 be created or destroyed but not transformed
- b) Energy cannot be created or destroyed, it can only be 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 that 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...

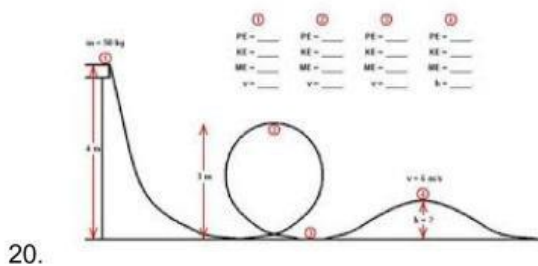
- a) Height
- b) Speed
- c) Light
- d) Time

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



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

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

