

Energy Grade 7 Quiz

Teacher's Answer Key

1. Temperature is measuring _____ energy, which is how fast the _____ in something are vibrating and moving. (thermal, molecules or particles)
2. _____ energy is the energy of motion. (kinetic)
3. Jar lids, spiral staircases, key rings and light bulb bases are all examples of _____ that wind around themselves. (inclined planes)
4. A lever has three parts: the load, the effort and the _____ (fulcrum)
5. Potential energy is the _____ that something has that can be released. (energy)
6. Hydraulic systems use _____ under pressure to move, lift, and support loads. (fluid)
7. A _____ is a wheel with a grooved rim around which a cord passes, and it acts to change the direction of a force applied to the cord, and is used to raise heavy loads. (pulley)
8. Springs and rubber bands can store elastic _____ energy. (potential)
9. A _____ is the metric unit of work or energy, and is found using the equation: $F \cdot d$. (Joule)
10. Power is the _____ that work is done over _____. (rate, time)
11. _____ is a measure of how much kinetic energy the particles in a substance has. (temperature)
12. Energy can be transferred, but never _____ or destroyed. (created)
13. Heat flows from an object of _____ temperature to an object of _____ temperature. (higher, lower)
14. Gravitational potential energy is the amount of energy something has due to its _____ above the ground. (height)
15. When a ball is released from a height, it has a lot of _____ but not very much _____. (potential, kinetic).
16. Just before a ball hits the ground, it has more _____ energy than _____ energy. (kinetic, potential)
17. Heat _____ is how much heat an object can absorb before its temperature increases. (capacity)
18. _____ is the transfer of thermal energy. (heat)
19. Pendulums have high _____ energy at the base of the arc of its swing. (kinetic)
20. Water droplets _____ on the outside of a cold glass of lemonade on a hot day. (condense)
21. _____ is the transfer of heat caused by the movement in a fluid when a hotter and less dense material rises, and colder, denser material sinks due to gravity. (convection)
22. A pan on the stove heats up by _____ when in direct contact with an electric burner. (conduction)
23. The energy from the sun reaches us through the vacuum of space by travelling through electromagnetic waves, called _____. (radiation)
24. A force is a _____ or pull. (push)
25. The first law of thermodynamics is:
_____. (Energy is conserved).
26. The second law of thermodynamics is:
_____. (Heat flows from hot to cold)

BONUS QUESTION:

The six different kinds of simple machines are: _____, _____, _____, _____, _____, _____. (inclined plane, lever, wedge, wheel & axle, screw, pulley)

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Student Quiz Sheet

Name _____

Fill in the blank:

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kinetic energy the particles in a substance has.

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vacuum of space by travelling through

electromagnetic waves, called _____.

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The six different kinds of simple machines are:
