

| | | | |
|---|--|-------------------------------------|---|
| 1. work | Force exerted on an object that causes it to move | 25. energy conversion | a change from one form of energy to another |
| 2. joule | SI unit of energy | 26. mechanical wave | A wave that requires a medium through which to travel |
| 3. power | The rate at which work is done | 27. medium | The material through which a wave travels |
| 4. watt | A measure of power equal to one joule of work per second. | 28. crest | Highest point of a wave |
| 5. horsepower | a common unit of power, equal to about 746 watts | 29. trough | Lowest point of a wave |
| 6. machine | A device that makes work easier | 30. transverse wave | waves that move the medium at right angles to the direction in which the waves travel |
| 7. mechanical advantage | the number of times a machine increases a force exerted on it | 31. compression | The part of a longitudinal wave where the particles of the medium are close together. |
| 8. actual mechanical advantage | the mechanical advantage that a machine provides in a real situation | 32. refraction | the bending of a wave as it enters a new medium at an angle |
| 9. ideal mechanical advantage | the mechanical advantage a machine would have without friction | 33. longitudinal wave | A wave in which the vibration of the medium is parallel to the direction the wave travels |
| 10. efficiency | The percentage of the input work that is converted to output work | 34. compression wave | Another name for a longitudinal wave |
| 11. compound machine | a machine made of more than one simple machine | 35. reflection | The bouncing back of a wave when it hits a surface through which it cannot pass. |
| 12. energy | the ability to do work | 36. diffraction | The bending of a wave as it moves around an obstacle or passes through a narrow opening |
| 13. kinetic energy | Energy of motion | 37. interference | the combination of two or more waves that results in a single wave |
| 14. potential energy | stored energy | 38. electromagnetic waves | A form of energy that can move through the vacuum of space. |
| 15. gravitational potential energy | Potential energy that depends on the height of an object | 39. intensity | The amount of energy per second carried through a unit area by a wave. |
| 16. elastic potential energy | the energy of stretched or compressed objects | 40. electromagnetic spectrum | the complete range of electromagnetic waves placed in order of increasing frequency |
| 17. mechanical energy | Kinetic or potential energy associated with the motion or position of an object | | |
| 18. thermal energy | Heat energy | | |
| 19. chemical energy | potential energy stored in chemical bonds | | |
| 20. electrical energy | Energy caused by the movement of electrons. | | |
| 21. electromagnetic energy | The energy of light and other forms of radiation, which travels through space as waves | | |
| 22. nuclear energy | Alternative energy source that is based on atomic fission. | | |
| 23. cellular energy | major energy source for cellular processes is adenosine triphosphate (ATP) | | |
| 24. solar energy | radiant energy emitted by the sun. | | |