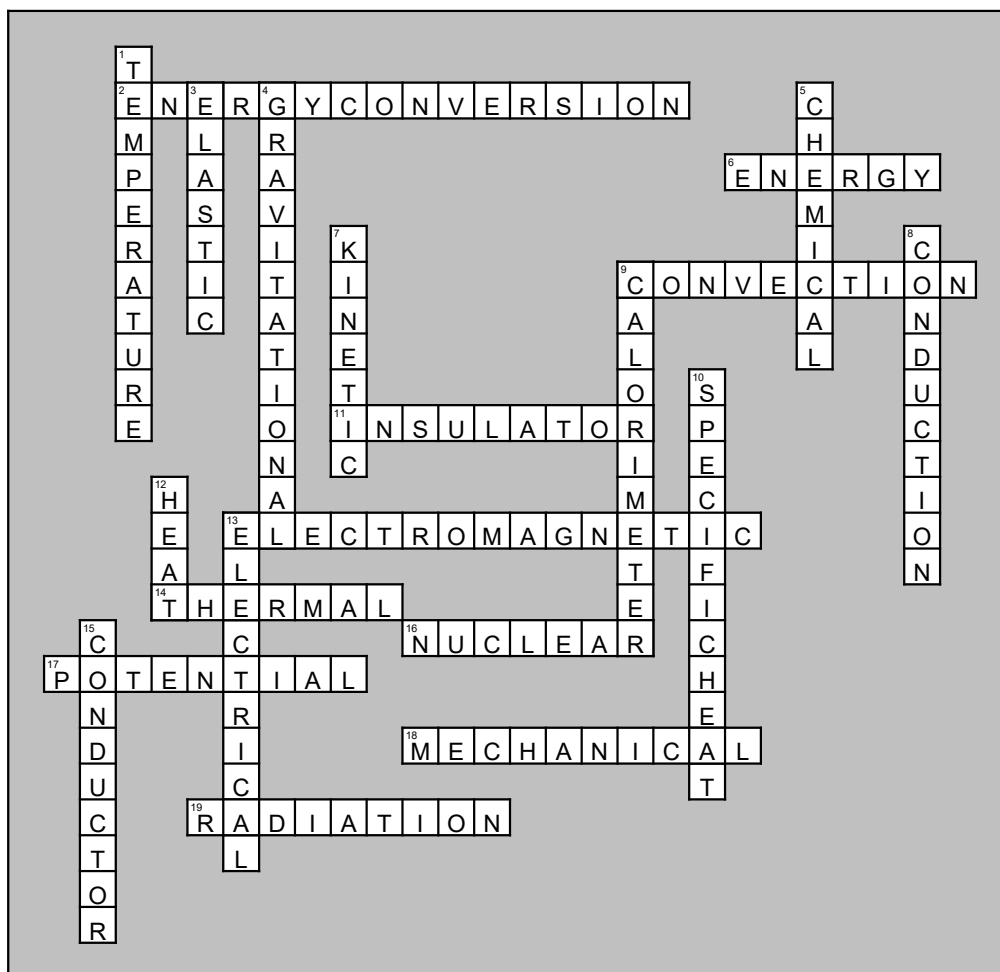


# Crossword



## Across

2. The process of changing (transforming) one form of energy into another.
6. The ability to do work in a system. Measured in "joules" in the metric system.
9. Transfer of energy between objects of different heat. Warmer matter rises, cooler matter sinks, causing currents in air, water, or land.
11. Materials that resist or prevent the flow of heat or electricity. e.g. glass, wood, air.
13. Energy that travels through space without transferring energy between particles. Radio, microwave, infrared, visible light, UV, x ray, gamma ray is the \_\_\_ spectrum.
14. Energy relating to heat and motion of microscopic particles comprising a substance. The faster the atoms move, the greater the energy.
16. Energy stored in the central mass of an atom. Fission (splitting atoms) and fusion (combining smaller atoms together) are examples.
17. Type of energy that is stored or held in readiness for use to do work. (mgh)
18. The energy associated with the motion and position of everyday objects. Total energy = PE + KE. Often involving machines.
19. Transfer of heat through space (without conduction between particles). e.g. bonfires warm us up.

## Down

1. The average kinetic energy (KE) of the particles in an object. How fast the molecules move in a system.
3. Type of potential energy (PE) that is stretched or compressed. e.g. springs, strings, bungee cords, rubber bands.
4. Type of potential energy (PE) that depends on the height an object rests upon, its mass, and acceleration due to gravity.
5. The energy stored in the bonds of molecules and compounds. e.g. fuel, food, ammunition.
7. Type of energy of a moving object. By virtue of its motion an object is capable of doing work. ( $\frac{1}{2}mv^2$ )
8. Transfer of energy when objects touch. No transfer of matter. Energy depends on the amount and effectiveness of collisions.
9. Instrument used to measure specific heat of substances.
10. The amount of heat needed to raise the temperature of a substance. The capacity to hold heat (resist a change in heat). Water's is very high for a liquid.
12. Flows from warmer objects towards cooler objects. Includes the mass of the object(s).
13. Energy related to the flow of electrons and associated with \_\_\_ charges.
15. Materials that allow the flow of heat or electricity readily (easily). e.g. metals.