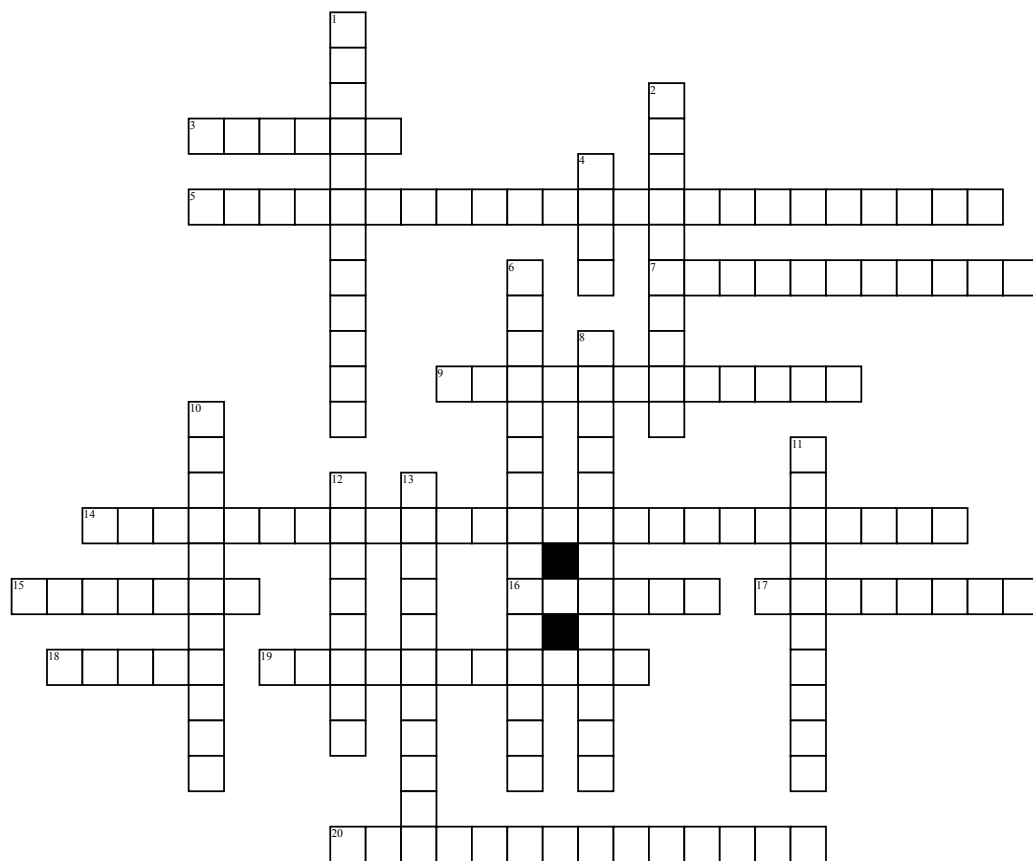


# Thermochemistry



## Across

3. The process of combining nuclei to produce a nucleus of greater mass.  
 5. Energy Stored in chemical bonds.  
 7. A process that absorbs heat from the surroundings.  
 9. The amount needed to increase the temperature of 1g of a substance by 1\* C.  
 14. In any chemical or physical process, energy is neither created nor destroyed.  
 15. The quantity of heat needed to raise the temperature of 1g of pure water 1\* C.  
 16. The capacity for doing work or producing heat.

17. If you add two or more thermochemical equations to give a final equation, then you also add the heats of reaction to give the final heat of reaction.

18. The SI unit of energy.

19. An insulated device used to measure the absorption or release of heat in chemical or physical processes.

20. The branch of chemistry concerned with the quantities of heat evolved or absorbed during chemical reactions.

## Down

1. The conversion of a liquid to a gas or a vapor.

2. A process that releases heat to its surroundings.

4. Is a form of energy arising from the random motion of the molecules of bodies, which may be transferred by conduction, convection, or radiation.

6. The energy possessed by a body by its position relative to others, stresses within itself, electric charge, and other factors.

8. Energy that a body possesses by being in motion.

10. The precise measurement of heat flow out of a system for chemical and physical processes.

11. Is the measure of bond strength in a chemical bond.

12. The heat content of a system at constant pressure.

13. A measure of the average kinetic energy of particles in matter; temperature determines the direction of heat transfer.

## Word Bank

Exothermic

Kinetic Energy

Heat

Law of Conservation of Energy

Chemical Potential Energy

Calorimeter

Potential Energy

Temperature

Hess' Law

Specific Heat

Enthalpy

Fusion

Thermochemical

Vaporization

Bond Energy

Calorie

Endothermic

Energy

Joule

Calorimetry