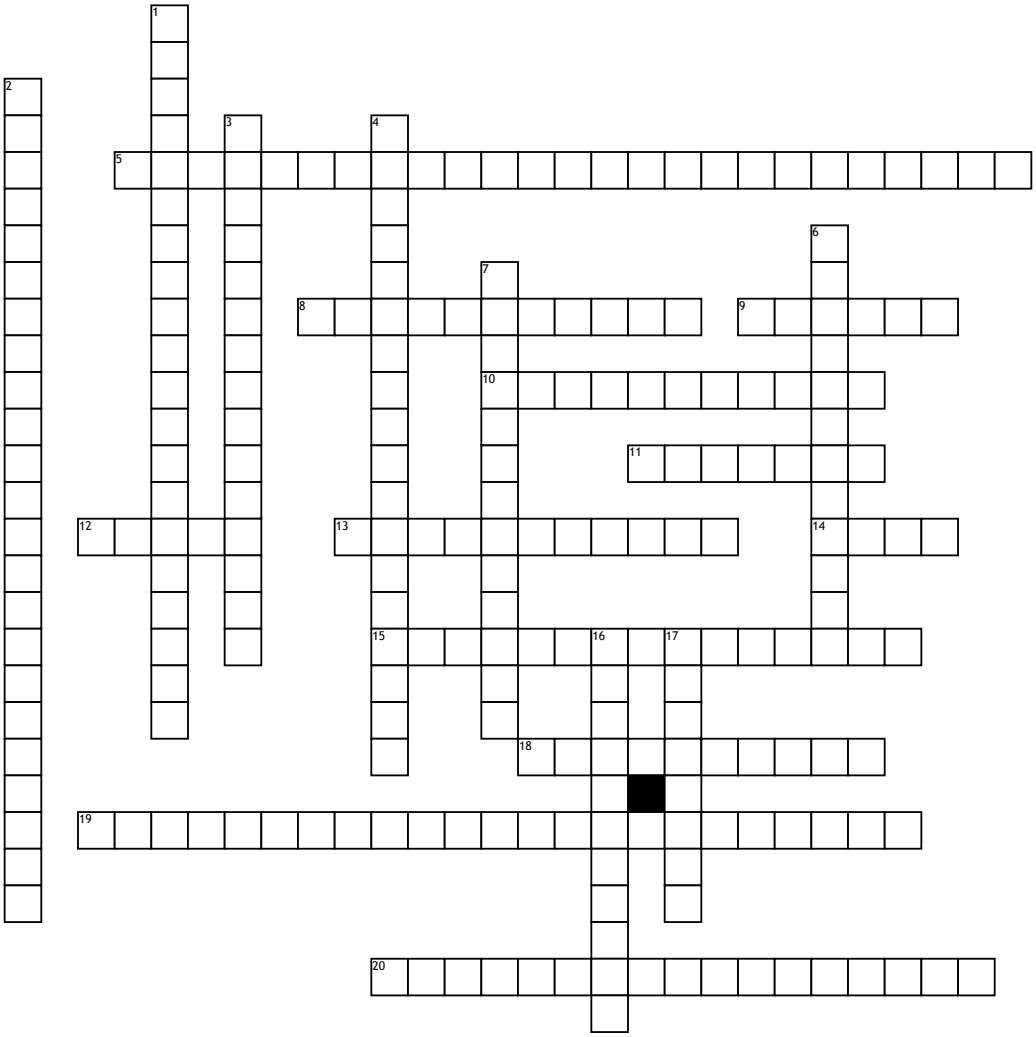
Name: _____ Date: _____

Thermo Crossword



Across

5. states that the total energy of an isolated system remains constant

8. the science associated with determining the changes in energy of a system by measuring the heat exchanged with the surroundings.

9. power derived from the utilization of physical or chemical resources, especially to provide light and heat or to work machines.

10. (of a reaction or process) accompanied by or requiring the absorption of heat.

11. the energy needed to raise the temperature of 1 gram of water through 1 °C

12. the SI unit of work or energy, equal to the work done by a force of one newton when its point of application moves one meter in the direction of action of the force, equivalent to one 3600th of a watt-hour.

13. the degree or intensity of heat present in a substance or object, especially as expressed according to a comparative scale and shown by a thermometer or perceived by touch

14. the quality of being hot; high temperature.

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

18. (of a reaction or process) accompanied by the release of heat.

19. a species is energy that can be absorbed or released due to a change of the particle number of the given species

20. the amount of heat necessary to melt (or freeze) 1.00 mole of a substance at its melting point

Down

1. change observed in a constituent thermodynamic system when 1 mole of a substance reacts completely with oxygen under standard conditions.

2. the amount of energy needed to change one mole of a substance from the liquid phase to the gas phase at constant temperature and pressure.

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

4. change that occurs in a system when matter is transformed by a given chemical reaction, when all reactants and products are in their standard states.

6. the heat required to raise the temperature of the unit mass of a given substance by a given amount

7. energy which a body possesses by virtue of being in motion.

16. an apparatus for measuring the amount of heat involved in a chemical reaction or other process.

17. a thermodynamic quantity equivalent to the total heat content of a system. It is equal to the internal energy of the system plus the product of pressure and volume

Word Bank

ENTHALPY OF COMBUSTION
LAW OF CONSERVATION OF ENERGY
CHEMICAL POTENTIAL ENERGY
ENTHALPY
MOLAR HEAT OF FUSION
ENERGY
HEAT
CALORIMETRY
SPECIFIC HEAT
ENTHALPY OF REACTION
KINETIC ENERGY
TEMPERATURE
CALORIMETER
EXOTHERMIC
JOULE
THERMOCHEMISTRY
ENDOTHERMIC
POTENTIAL ENERGY
MOLAR HEAT OF VAPORIZATION
CALORIE