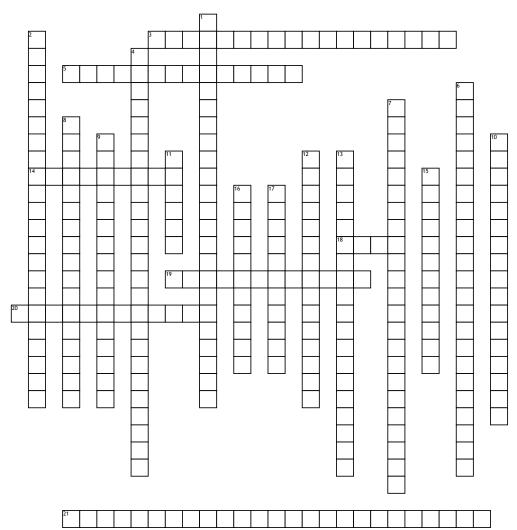
Name: _____ Date: _____

Thermochemistry Crossword



Across

- 3. describes a process in which the system absorbs energy from its surroundings; usually, but not always, in the form of heat
- **5.** change in the enthalpy of a chemical reaction that occurs at a constant pressure
- 14. thermodynamic quantity equivalent to the total heat content of a system it's equal to the internal energy of the system plus the product of pressure and volume
- 18. quality of being hot; high temperature
- 19. heat required to raise the temperature of the unit mass of a given substance by a given amount
- 20. everything else; rest of the universe
- **21.** total energy of an isolated system remains constant

Down

- 1. heat evolved when a vapor changes to a liquid
- ${\bf 2.}$ balanced stoichiometric chemical equation that includes the enthalpy change
- **4.** heat lost when one mole of a liquid solidifies at a constant temperature
- 6. energy stored in chemical bonds of a substance
- 7. amount of heat necessary to boil (or condense)
- 8. one that releases, "gives out" energy or heat
- **9.** the energy released as heat when a compound undergoes compel combustion with oxygen under standard conditions
- **10.** an important part of energy calculations since it tells you how much energy is needed to melt each mole of substance
- 11. set is substances and energy that is being studied

- **12.** branch of chemistry concerned with the quantities of heat evolved or absorbed during chemical reactions
- **13.** amount of heat released (or absorbed) when one mole of a particular substance is dissolved in a large volume of a particular solvent
- **15.** number of heat units needed to raise the temperature of a body by one degree
- **16.** science or act of measuring changes in state variables of a body for the purpose of deriving the heat transfer associated with changes of its state due
- **17.** an apparatus for measuring the amount of heat involved in a chemical reaction

Word Bank

enthalapy thermochemistry molar heat of fusion specific heat exothermic process molar heat of solution surroundings
calorimetry
calorimeter
molar heat of vaporization
law of conservation of energy

system molar heat of condensation heat heat of combustion chemical potential energy heat capacity heat of reaction molar heat of solidification endothermic process thermochemical equation