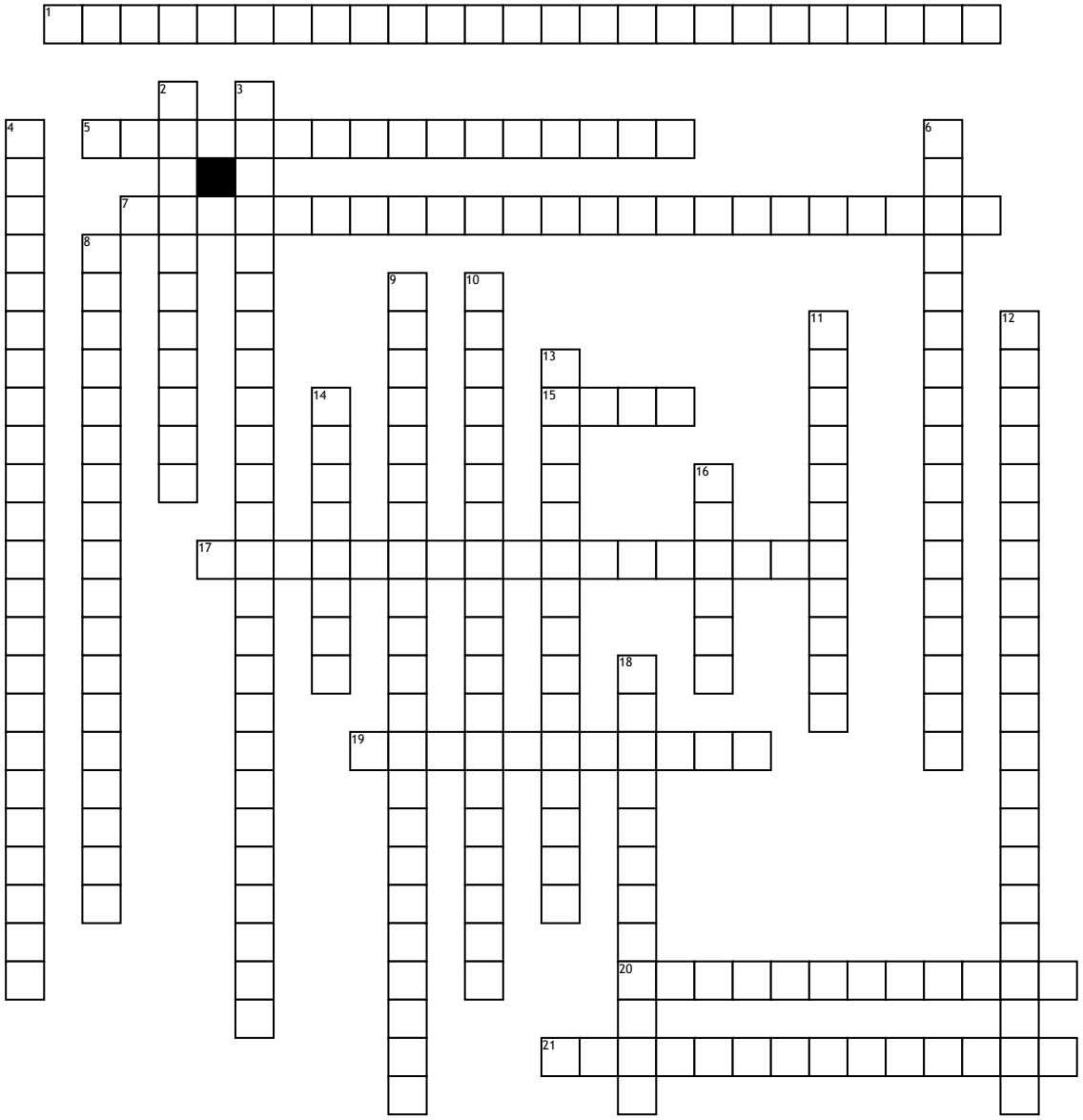
Name: _____ Date: _____

Thermochemistry



Across

1. in any chemical or physical process, energy is neither created nor destroyed
5. the energy released as heat when a compound undergoes complete combustion with oxygen under standard conditions
7. Water is 40.7 kj/mol, simply divide the molar heat by 18.015 g/mol
15. energy that transfer from one object to another because of the temperature difference between the objects
17. units for the molar heat of fusion are kilo joules per Mol
19. object used for calorimetry of the process of measuring the heat of chemical reactions or physical changes as well as heat capacity
20. amount of heat needed to increase the temperature of an object exactly
21. the change in the enthaply of a chemical reaction that occurs at a constant pressure

Down

2. insulated device used to measure the absorption or release of heat I. chemical or physical process
3. melting of 1 mole of ice at 0oC to of water at 0oC requires the absorption of 6.01 kj of heat
4. energy stored in chemical bonds
6. a process that releases heat to its surroundings
8. a process that absorbs heat from the surrounding
9. balanced stoichiometric chemical equation that includes the enthaply change
10. amount of heat released when one mole of a particular substance is dissolved in a large volume of a particular solvent
11. Everything in the universe outside of the system
12. exact opposite of vaporation
13. study of energy changes that occur during chemical reactions and change in state
14. measure of energy in a thermodynamic system
16. a part of the universe on which you focus your attention
18. amount of heat needed to increase the temperature of 1 gram 1 degrees celcuis