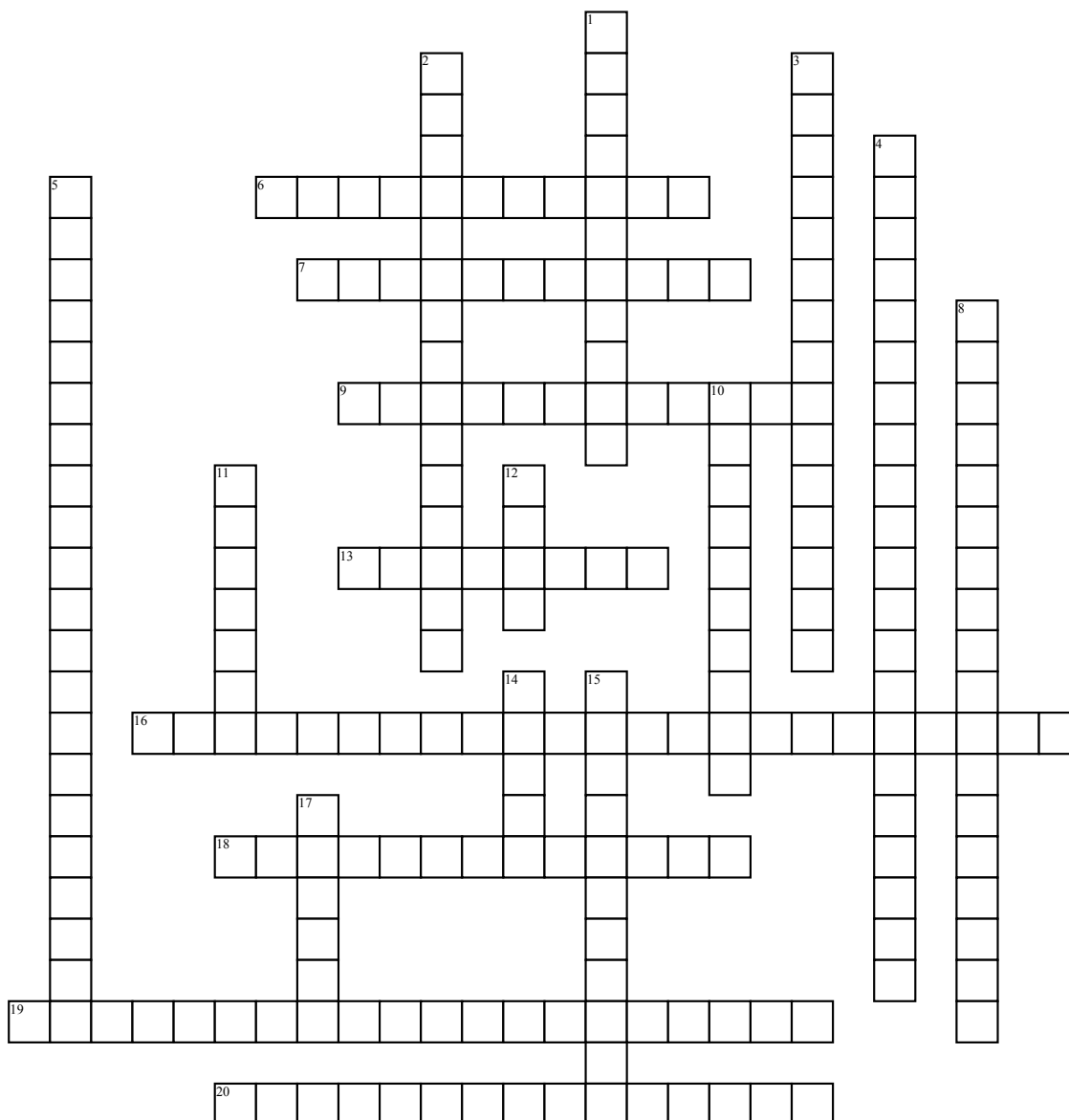


# Thermochemistry puzzle



**Across**

- 6. the process of measuring the amount of heat released or absorbed during a chemical reaction
- 7. a device used to measure the heat flow of a chemical reaction or physical change
- 9. the heat required to raise the temperature of the unit mass of a given substance by a given amount
- 13. equal to the system's internal energy plus the product of its pressure and volume
- 16. energy that can be absorbed or released due to a change of the particle number of the given species
- 18. energy which a body possesses by virtue of being in motion

- 19. the heat energy given out when one mole of a substance burns completely in oxygen
  - 20. the energy held by an object because of its position relative to other objects
- Down**
- 1. the absorbing of heat
  - 2. the study of the heat energy which is associated with chemical reactions and/or physical transformations.
  - 3. the amount of energy needed to change one mole of a substance from the solid phase to the liquid phase at constant temperature and pressure
  - 4. states that the total energy of an isolated system remains constant
  - 5. kilojoules per mole
  - 8. the difference in enthalpy between products and reactants

- 10. accompanied by the release of heat
- 11. the energy needed to raise the temperature of 1 gram of water through 1 °C
- 12. the quality of being hot; high temperature
- 14. the SI unit of work or energy
- 15. degree or intensity of heat present in a substance or object
- 17. the quantitative property that must be transferred to an object in order to perform work on, or to heat, the object.