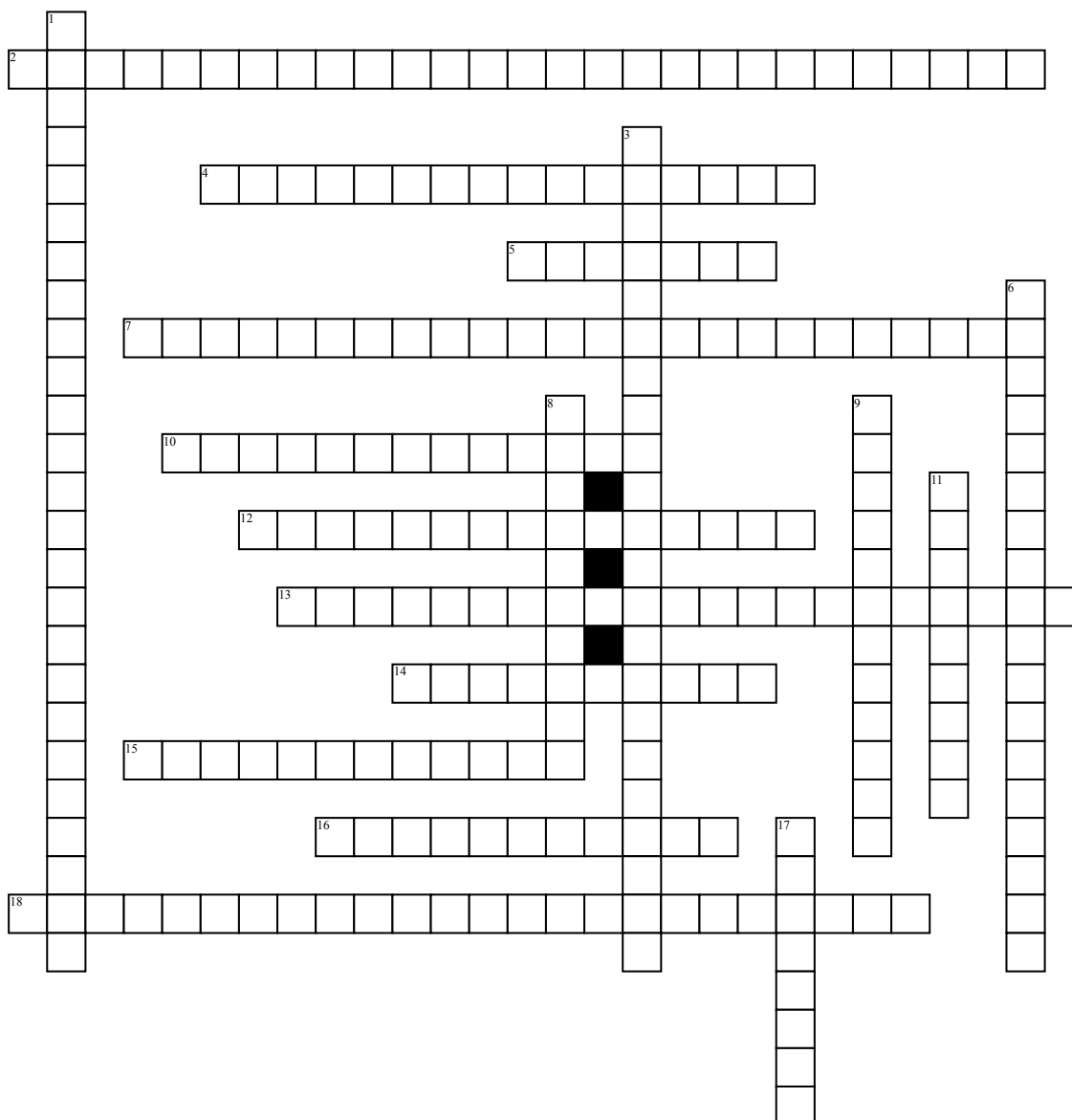


Name: \_\_\_\_\_

# Chemistry Chapter 13 Crossword Puzzle



## Across

2. The amount of heat required to convert a mole of liquid at its boiling point to its vapor at the same temperature.
4.  $\Delta G = \Delta H - (T)\Delta S$
5. Measure of randomness or lack of orderliness in a system.
7. The change in enthalpy that occurs when one mole of the compound is formed from its elements.
10. 25°C (298 K) and 1 atm of pressure
12. The branch of science that studies the transfer of energy during a chemical reaction or phase change.
13. The quantity of heat required to melt one mole of a solid to a liquid with no temperature change.

14. J. Willard Gibbs. The change in enthalpy and changes in entropy into a single term.

15. The type of heat that is sensed by a change in temperature.

16. Instrument in which a thermometer detects temperature change that occurs during a chemical reaction.

18. Enthalpy change for the reaction that produces 1 mole of a compound in its standard state from its elements in their standard states.

## Down

1. Energy is released as heat by the complete burning of one mole of a substance at standard conditions.

3. Chemical equation that shows the physical state of each substance

6. Change of enthalpy that occurs during a reaction.

8. The type of heat in which no temperature is observed; produces a phase change.

9. The amount of heat required to raise the temperature of 1g of the substance by 1°C

11. States that the enthalpy change of reaction = the sum of the enthalpy changes from each step of the process.

17. The heat content of a system at a constant pressure; helps quantify change in energy.