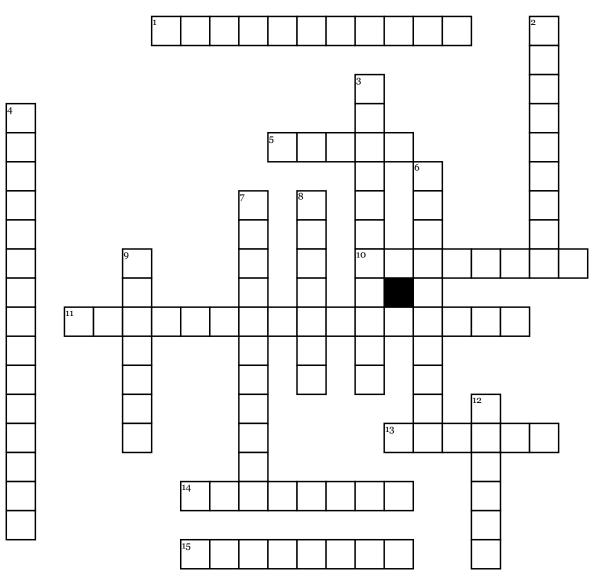
## Rate and Equilibrium Review



## <u>Across</u>

**1.** The state in which the forward and reverse reactions balance

5. Another substance included in equilibrium equations and written as (g)
10. A substance that increases the rate of a chemical reaction without being consumed
11. A catalyst reduces the

\_\_\_\_\_ during the reaction **13.** Equilibrium is a state of **14.** A \_\_\_\_\_\_ in temperature will shift the equilibrium to the same side where the temperature is located

**15.** An increase in concentration will shift the equilibrium to the \_\_\_\_\_ side **Down** 

## **2.** To determine the overall order for the reaction, you must add the

3. The \_\_\_\_\_\_ indicates the number of moles in the equation
4. Atoms, ions, and molecules must collide in order to react

6. Released heat (feels hot)

7. Absorbed heat (feels cool)

8. Substances that are included in equilibrium equations and are written as (ag)
9. The relationship between the concentration of the reactants and the rate of reaction
12. The greater the surface area, the \_\_\_\_\_ the chance is of molecules colliding