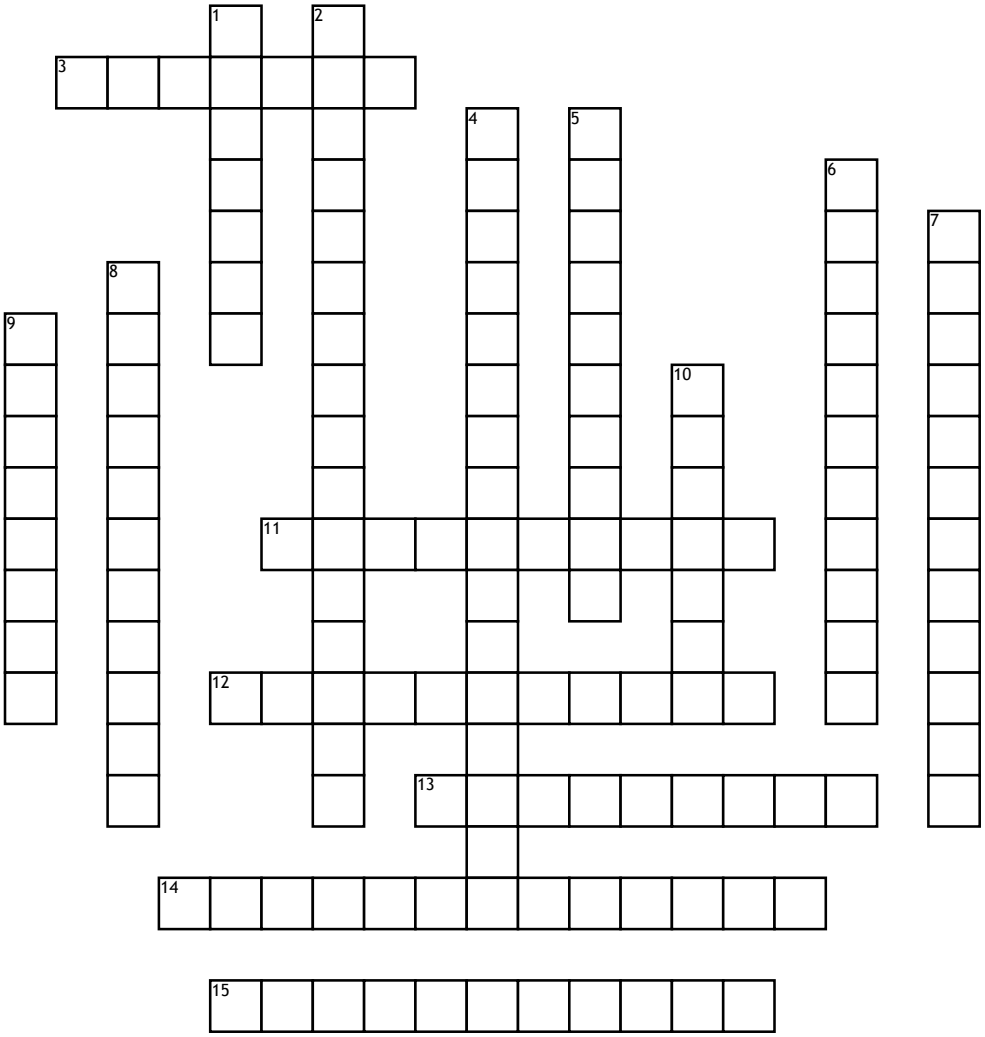
Rate & Equilibrium



Across

3. Chemical equilibrium is a state in which the forward and reverse reactions ___ each other because they take place at equal rates.

11. A ___ reaction is a chemical reaction that can occur in both the forward and reverse directions, such as the formation of ammonia.

12. Increasing the ___ of reactants increases the opportunity for collisions.

13. ___ speed up chemical reactions.

14. An increase in ___ results in an increase in the frequency of collisions.

15. The value of Keq is constant only at a specified ___.

Down

1. ___ express the relationship between the rate of chemical reactions and the concentration of the reaction.

2. The minimum amount of energy required by resting particles in order to form the activated complex.

4. A factor that affects the reaction rate of a chemical reaction.

5. Reaction that releases heat.

6. Reaction that absorbs heat.

7. average rate = change in quantity/change in time

8. If I change the conditions the ___ will shift to the opposite side to make more reactant or product.

9. Reactants react to form ___.

10. Atoms, ions, and molecules must ___ in order to react.

Word Bank

products
balance
Exothermic
nature of reactant
reversible
surface area
reaction rate
collide
temperature
catalysts
equilibrium
concentration
Activation energy
rate law
endothermic