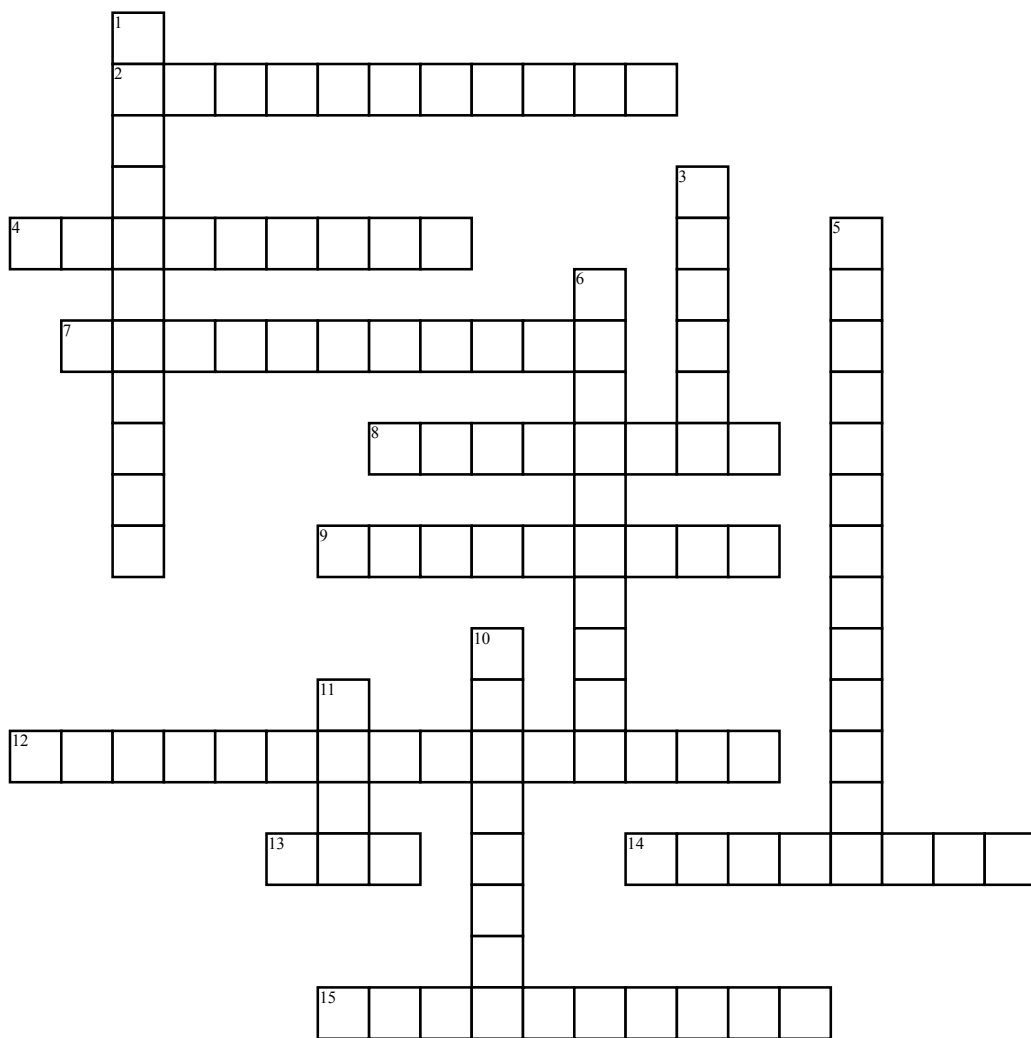


Equilibrium and Reaction Rates



Across

2. absorbs heat
4. are used to form products
7. increasing this will increase the kinetic energy in a reaction rate
8. an ____ in temperature will cause a shift to the right because the temperature is on the left
9. add more reactant or product the equilibrium will shift to the ____ side
12. atoms, ions, and molecules must collide in order to react

13. only includes gases and aqueous
14. helped us learn about chemistry this year

15. releases heat

Down

1. developed a principle that states if you change the conditions the equilibrium will shift to the opposite side to make more reactant or product
3. used to show that products are formed
5. the more ____ the faster the reaction

6. a ____ reaction is a chemical reaction that can occur in both the forward and reverse directions
10. increases the rate of a chemical reaction by reducing the activation energy
11. ____ known factors affect the reaction rate (how many)

Word Bank

reactants	exothermic	concentration	mcclendon	endothermic
reversible	increase	collision theory	Arrows	catalyst
Temperature	Keq	five	opposite	le chatelier