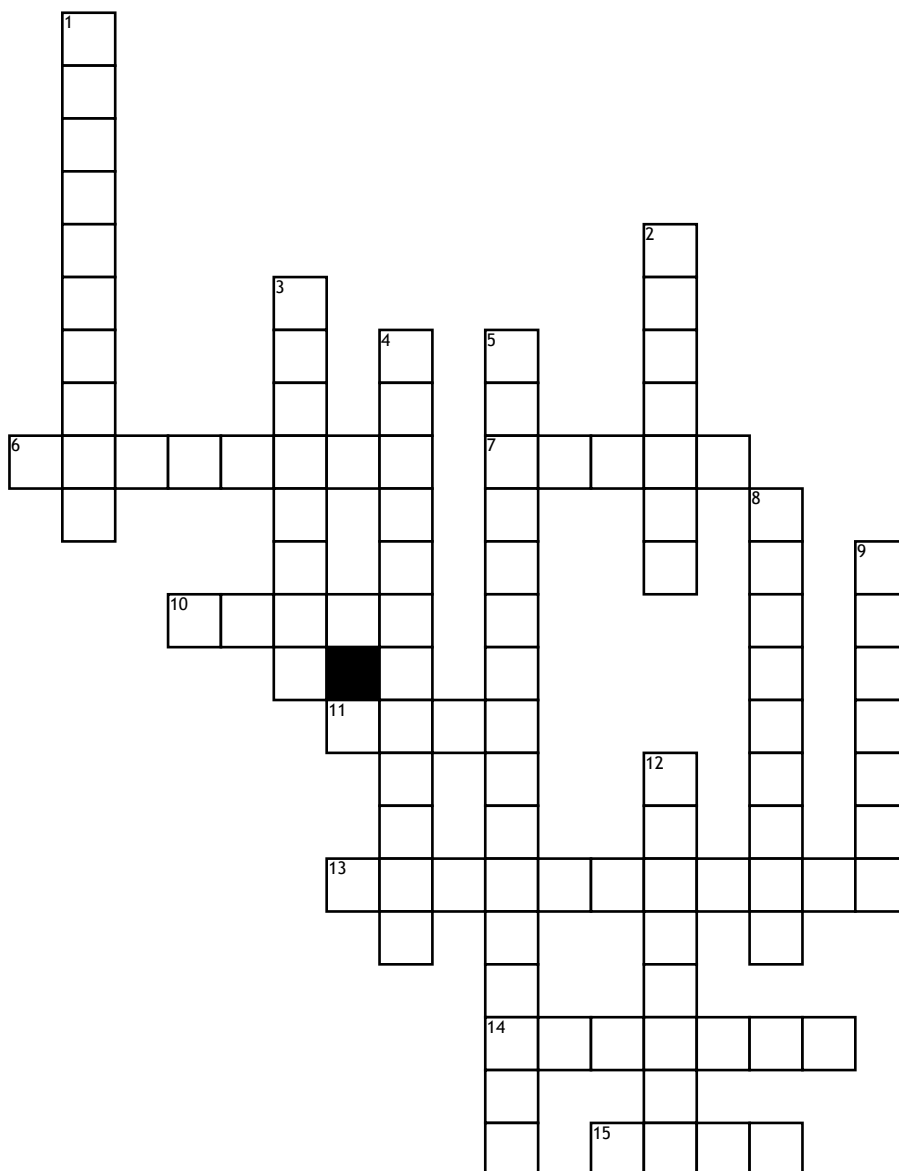


# Chemical Kinetics and Chemical Equilibrium



## Across

6. When the container volume is increased, the system will shift to \_\_\_\_\_ its volume.

7. The reaction  $A + 2B \rightarrow C$  is a \_\_\_\_\_ order reaction.

10. The unit for  $k$  in a first order reaction

11. This is constant in zero order reactions

13. Properties, concentration, temperature, and catalysts are examples of factors that affect \_\_\_\_\_ reactions.

14. Pure solids and \_\_\_\_\_ are left out of an equilibrium constant expression.

15. For the reaction  $\text{NH}_4\text{Cl}(\text{aq}) \rightarrow \text{NH}_3(\text{g}) + \text{HCl}(\text{g})$ , the equation will shift \_\_\_\_\_ when pressure is increased.

## Down

1. How the exponents in a rate law equation are determined

2. For the equation  $\text{N}_2(\text{g}) + 2\text{O}_2(\text{g}) \rightarrow 2\text{NO}_2(\text{g})$ , the concentration of  $\text{NO}_2$  is \_\_\_\_\_.

3. This speeds up a reaction without being consumed

4. "p" is known as this in the Arrhenius equation

5. This acts as a intermediary between the reactants and products in a reaction

8. This prevents a substrate from the action of an enzyme

9. For  $K_c = \frac{[\text{A}][\text{B}]^2}{[\text{C}]}$ , if A is halved and B is doubled, the value of  $K_c$  \_\_\_\_\_

12. This happens to an enzyme if the temperature goes above or below the temperature range