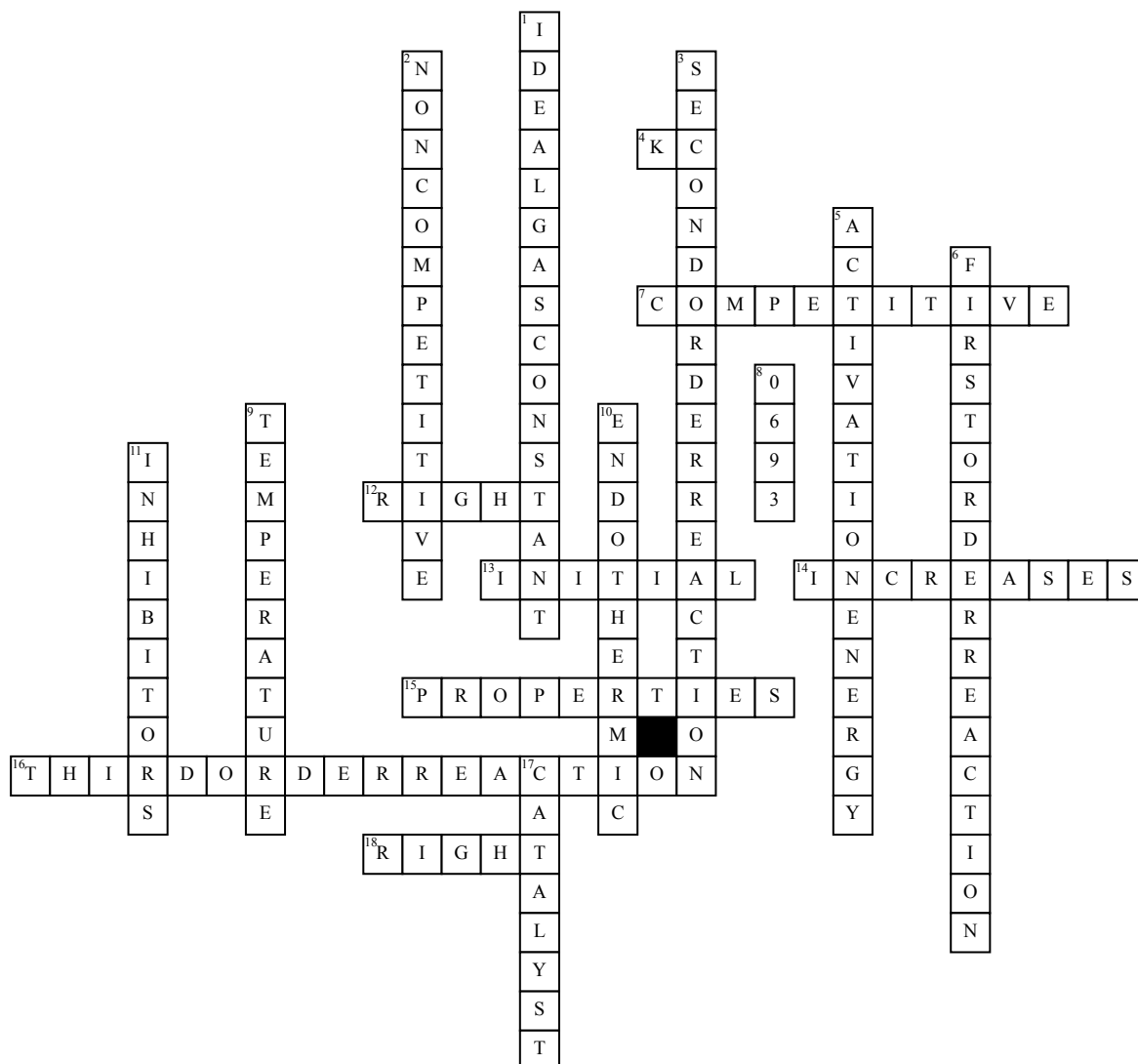


# Chemical Equilibrium and Chemical Kinetics Crossword Puzzle



## Across

4. The equilibrium constant in chemical equilibrium that is based on the concentration

7. inhibitor that competes for active site

12. If the product in the rx.  $N_2 + 3H_2 \rightleftharpoons 2NH_3$  is removed, which side will equilibrium shift?

13. the concentration of A is final minus \_\_\_\_\_

14. In a reaction rate if the temperature increases then the rate \_\_\_\_\_

15. a homogeneous factor affecting rx. rate (includes polarity and size)

16.  $A+B+C \rightleftharpoons D$

18. In the reaction  $2NO + O_2 \rightleftharpoons 2NO_2$ , if pressure is increased which side will it shift to?

## Down

1. In the formula  $K_p = K_c(RT)^{\text{change in "n"}}$ , what does R stand for?

2. inhibitors that deforms enzyme's active site

3.  $A+B \rightleftharpoons C$

5. In the formula  $\ln(K_2/K_1) = E_a/R (1/T_1 - 1/T_2)$ ,  $E_a$  stands for \_\_\_\_\_

6.  $A \rightleftharpoons B+C$

8. If K is known for a first order half life rx. then  $t_{1/2} = \text{_____}/k$

9. the rate is equal to the concentration of A over the change in \_\_\_\_\_

10. The increase in temperature will cause a reaction to shift to the \_\_\_\_\_ side

11. These enzymes bind to allosteric site

17. An enzyme that increases in rate without being consumed