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| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Chemical Equilibrium and Chemical Kinetics Crossword Puzzle

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|  |  |  |  | I |  |  | E |  |  |  | E |  | 13  I | N | I | T | I | A | L |  | 14  I | N | C | R | E | A | S | E | S |
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|  |  |  |  | T |  |  | T |  |  |  | 15  P | R | O | P | E | R | T | I | E | S |  | E |  |  | E |  |  |  |  |
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|  | 16  T | H | I | R | D | O | R | D | E | R | R | E | A | 17  C | T | I | O | N |  |  |  | G |  |  | C |  |  |  |  |
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| **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. N2 + 3H2 <====> 2NH3 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====>D  **18.** In the reaction 2NO + O2 <===> 2NO2, if pressure is increased which side will it shift to? | **Down**  **1.** In the formula Kp=Kc (RT)^change in "n", what does R stand for?  **2.** inhibitors that deforms enzyme's active site  **3.** A+B===>C  **5.** In the formula ln(K2/K1) = Ea/R (1/T1 - 1/T2), Ea stands for \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_  **6.** A ==> B+C  **8.** If K is known for a first order half life rx. then t 1/2= \_\_\_\_\_\_\_\_/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 |