

Chemistry 240
Prof. B. Hanson
Spring 2018

KEY

Name: _____

Quiz #3

1. An enzyme active site provides amino acid residues that help _____ the reaction. bind the substrate and catalyze
2. K_m is a measure of substrate binding affinity
3. Enzyme A has a $\frac{k_{cat}}{K_m}$ value of $10^9 M^{-1}s^{-1}$, while enzyme B has a value of $10^6 M^{-1}s^{-1}$. Which enzyme is considered to be more efficient/perfected? Circle the name of the enzyme.
4. As k_{cat} gets larger, ΔG becomes more negative. True or False? False Circle your answer.

\uparrow kinetic quantity
 \uparrow thermodynamic quantity
 \uparrow unrelated