Faculty Submitting: Siobhan Toal
Specify here whether "Pre" or "End" of Unit and the Unit #: Pre Unit 12

LOs: Describe the implications of reaction reversibility for chemical equilibrium Calculate, manipulate, and interpret equilibrium constants (Kf, Kc, Kp, Ksp, Kw, Kf) Predict the direction of an equilibrium by comparing the equilibrium constant and the reaction quotient Define the differences between kinetics, thermodynamics and equilibrium *Readings: Ch 13*	
Unit 12_ Question 1	**Canvas Question Type:** multiple dropdowns
	Question Text: When the [blank1] of the forward and reverse reaction direction are equal, a reversible reaction is said to be [blank 2] Blank 1 Rates Concentrations Blank 2 Complete At equilibrium
Read More	https://openstax.org/books/chemistry-2e/pages/13-1-chemical-equilibria
Unit 12_ Question 2	**Canvas Question Type:** Multiple Choice Question Text: When equilibrium is reached, the concentrations of products and reactants: Correct Answer: Remain constant Wrong Answers Are equal to eachother Are both at 100%
Read more	**https://openstax.org/books/chemistry-2e/pages/13-2-equilibrium-constants**

Unit 12_ Question 3	**Canvas Question type: M**ultiple choice **Question Text:** What is the general formulation for calculating an equilibrium constant? (Where m and n are the appropriate stoichiometric coefficients) Correct Answer: $[products]^m/[reactants]^n$ Wrong Answers: $[reactants]^m/[products]^n$ $[reactants]^m x[products]^n$ $[reactants]^m+[products]^n$
Read More	https://openstax.org/books/chemistry-2e/pages/13-2-equilibrium-constants
Unit 12_ Question 4 **a**	**Canvas Question type:** Multiple choice **Question Text:** An equilibrium constant with a large magnitude indicates: Correct Answer: more product at equilibrium Wrong Answers: A fast reaction A slow reaction more reactant at equilibrium
b	**Question Text:** An equilibrium constant with a small magnitude indicates: Correct Answer: more reactant at equilibrium Wrong Answers: A fast reaction A slow reaction more product at equilibrium
Read More	https://openstax.org/books/chemistry-2e/pages/13-2-equilibrium-constants
Unit 12_ Question 5	**Canvas Question type:** Multiple Checkboxes/Answers **Question Text:**

	Which of the following (may be more than one) will cause a shift of the system to re-establish equilibrium Correct Answers Temperature change Concentration change Pressure changes Volume changes