	Statement	Guidance
7.1.U1	A state of equilibrium is reached in a closed system when the rates of the forward and reverse reactions are equal	Physical and chemical systems should be covered.
7.1.U2	The equilibrium law describes how the equilibrium constant (K_c) can be determined for a particular chemical reaction	Relationship between K_c values for reactions that are multiples or inverses of one another should be covered
7.1.U3	The magnitude of the equilibrium constant indicates the extent of a reaction at equilibrium and is temperature dependent.	
7.1.U4	The reaction quotient (Q) measures the relative amount of products and reactants present during a reaction at a particular point in time. Q is the equilibrium expression with non-equilibrium concentrations. The position of the equilibrium changes with changes in concentration, pressure, and temperature	
7.1.U5	A catalyst has no effect on the position of equilibrium or the equilibrium constant.	
17.1.U6	Le Châtelier's principle for changes in concentration can be explained by the equilibrium law.	
17.1.U7	The position of equilibrium corresponds to a maximum value of entropy and a minimum in the value of the Gibbs free energy.	
17.1.U8	The Gibbs free energy change of a reaction and the equilibrium constant can both be used to measure the position of an equilibrium reaction and are related by the equation, $\Delta G^\circ = -RT \ln K$	