Writing Equilibrium equations for Heterogeneous Equilibria.

 As a general rule, the concentrations of pure solids and pure liquids are not included when writing and equilibrium equation.

 The concentrations of gases and concentrations of solutes in solutions are included because only those concentrations can be varied.

 The equations for Kc and Kp and the equation that represents the relationship between the two can be used to calculate any of the variables that you need.

Example:

2CO2 (g)+ C(s) 2CO2 (g)

Kc = [CO2]2 / [CO2] (solid carbon is omitted)