

## Learning Objectives for Activities and Activity Coefficients

At the end of this chapter you should be able to...

- Describe non-ideal solutions and interpret their behavior from a molecular perspective.
- Use activity and activity coefficients to describe non-ideal solutions.
- Use Henry's Law and Raoult's Law to define the ideal dilute solution.
- Determine activity coefficients for solvents and solutes using vapor pressure measurements and/or colligative property measurements.
- Solve problems and describe phase and reaction equilibrium involving solutions by using standard states and activities.
- Calculate activity coefficients for ionic solutions using the Debye-Hückel Equation and Davies Equation.
- Solve equilibrium problems that involve the production of ions that take into account the non-ideality of the solution.