

## CHM 1046 Exam 2 Review Sheet

Study all of the concepts and equations on the following list.

- Equilibrium  
Review [Figure 13.2](#).
- Setting up and solving an Equilibrium Table  
Review Example 14.01 and [Example 13.6](#).
- Equilibrium Constant Expression and its determining its Value  
Review Example 14.02, as well as Examples [13.1](#), [13.2](#), [1.7](#), and [13.8](#).
- Using  $K_c$  to find Concentrations  
Review Example 14.03, [13.9](#), and [13.10](#).  
Also, review Exercises [13.64](#), and [13.66](#).
- Determining  $K_p$  using  $K_c$ ,  $\Delta n$ , and  $(RT)^{\Delta n}$   
Review Example 14.04, Example [13.4](#), and Exercise [13.25](#).
- Heterogeneous Equilibrium (multi-phase)  
Review page 3 of chapter 14 notes, and review Exercise [13.15](#).
- Expression and Value for the Reaction Quotient ( $Q_c$ )  
Review Example 14.05 and Exercise [13.17](#).
- LeChatelier's principle (the effect of changes to a system at equilibrium)  
Review this [image](#). Then, review Examples 14.09 and 14.10,  
as well as Exercises [13.36](#) and [13.38](#).
- Arrhenius, Bronsted-Lowry, and Lewis Concepts of Acids and Bases  
Review images in Section [14.1](#) and [15.2](#). Review Example 15.01.  
Review Exercises [14.3](#), [14.5](#), and [15.76](#).
- Expression and Value for  $K_w$   
Review Example 15.04, [14.1](#), and [14.2](#). Review Exercise [14.15](#).
- pH, pOH,  $[H_3O^+]$ , and  $[OH^-]$   
Review Figure [14.2](#). Then, review Examples 15.05 and 15.06,  
as well as Exercise [14.19](#).  
Find  $[H_3O^+]$ ,  $[OH^-]$ , pH, and pOH for each of these problems.