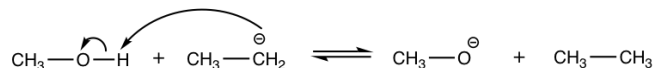


3.6: Answers to Practice Questions Chapter 3

3.1 Predict and draw the products of following reaction; use curved arrows to show the mechanism.

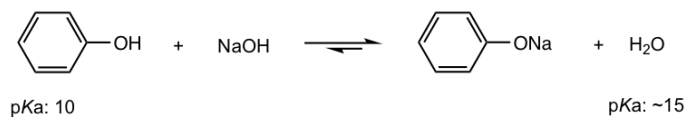


3.2

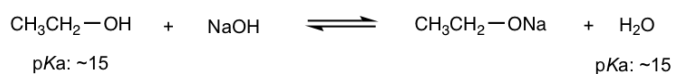
- Practice drawing the resonance structures of the conjugate base of phenol by yourself!

Solutions included in the section.

- It is because of the special acidity of phenol (and other aromatic alcohol) that NaOH can be used to deprotonate phenol effectively, but not to normal alcohols, like ethanol. Show the reaction equations of these reactions and explain the difference by applying the pK_a values.

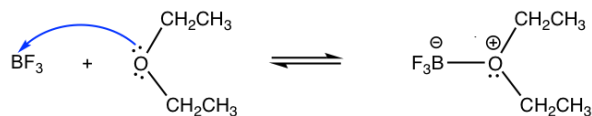


the equilibrium lies on the **product side**, so NaOH is able to deprotonate phenol



stay at equilibrium, so NaOH is **not** able to deprotonate ethanol effectively

3.3 Show the product of the following LA-LB reaction:



This page titled [3.6: Answers to Practice Questions Chapter 3](#) is shared under a [CC BY-NC-SA 4.0](#) license and was authored, remixed, and/or curated by [Xin Liu \(Kwantlen Polytechnic University\)](#).