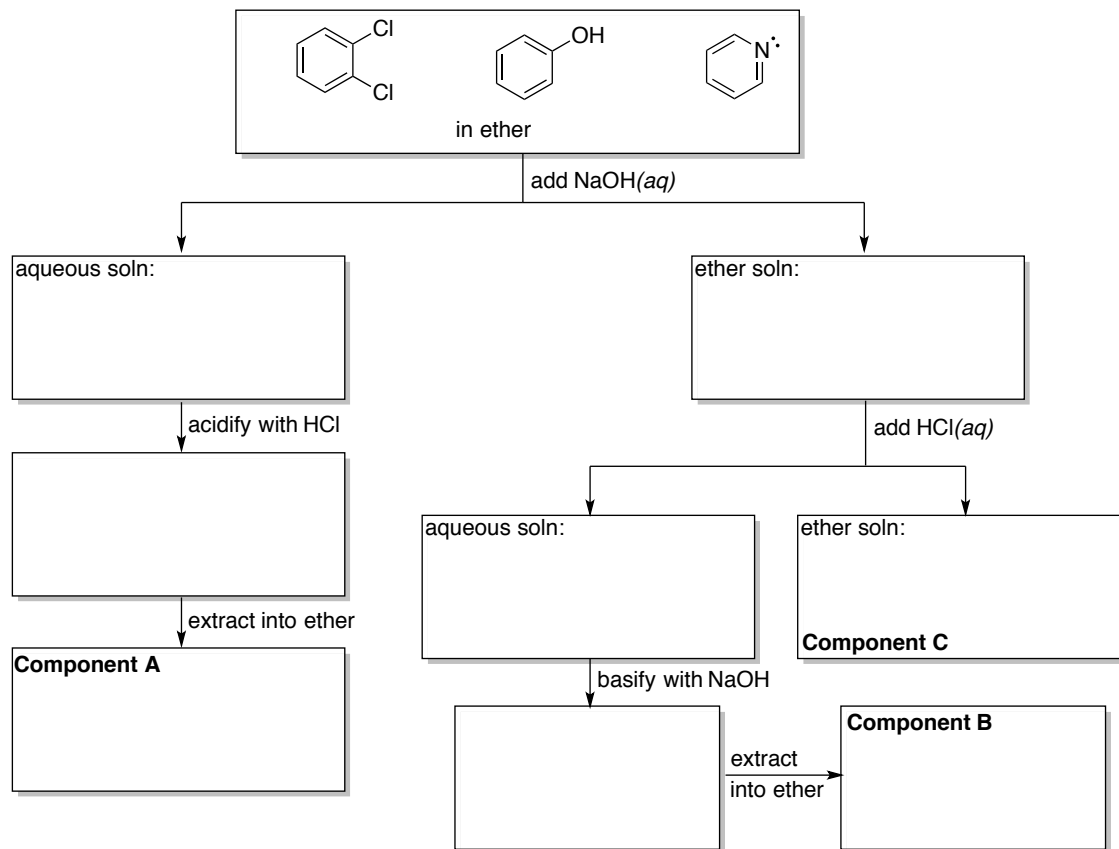


## Chemistry 235 Experiment 6 – Report Sheet

<b>Name:</b>	<b>Lab Room:</b>	<b>Desk #:</b>
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### Pre-Lab Questions (Complete Prior to Lab)

- Complete the extraction scheme for the separation of 1,2-dichlorobenzene, phenol (pKa = 10), and pyridine.



- Sodium bicarbonate (NaHCO<sub>3</sub>) can be used as a base to extract carboxylic acids into the aqueous layer, but it cannot be used to extract most alcohols. Explain.
  
- Explain the difference between extraction and washing.
  
- Look up the densities and miscibility of hexane and water. *See the miscibility chart from experiment 2.* Would these two solvents work well together in an extraction procedure? Explain.

## Experimental Data (Complete During Lab)

<b>Unknown:</b>		<b>Mass:</b>	
<b>Neutral Component</b>	<b>Mp:</b>	<b>Mass:</b>	<b>% Recovery:</b>
<b>Organic Acid</b>	<b>Mp:</b>	<b>Mass:</b>	<b>% Recovery:</b>
<b>Compounds Present In Unknown:</b>			

### Potential Unknown Compounds:

Neutral Compounds	Melting Point °C
Fluorenone	84
Benzil	95
Dibenzalacetone	112

Organic Acids	Melting Point °C
Benzoic Acid	122
<i>m</i> -Toluic Acid	111
<i>o</i> -Toluic Acid	107

### Post-Lab Questions (Complete Following Lab)

1. In this procedure your organic acid was isolated by precipitation and subsequent filtration. If the resulting organic acid had been soluble in the aqueous solution, how could it have been isolated?
  
2. You are given a two-phase system containing an aqueous layer and an organic layer, but you don't know which is which, nor do you know the identity of the organic solvent. How could you determine which layer is the water layer?
  
3. In this experiment, could you have used methanol in place of dichloromethane? *Hint: Think back to pre-lab question 4.*