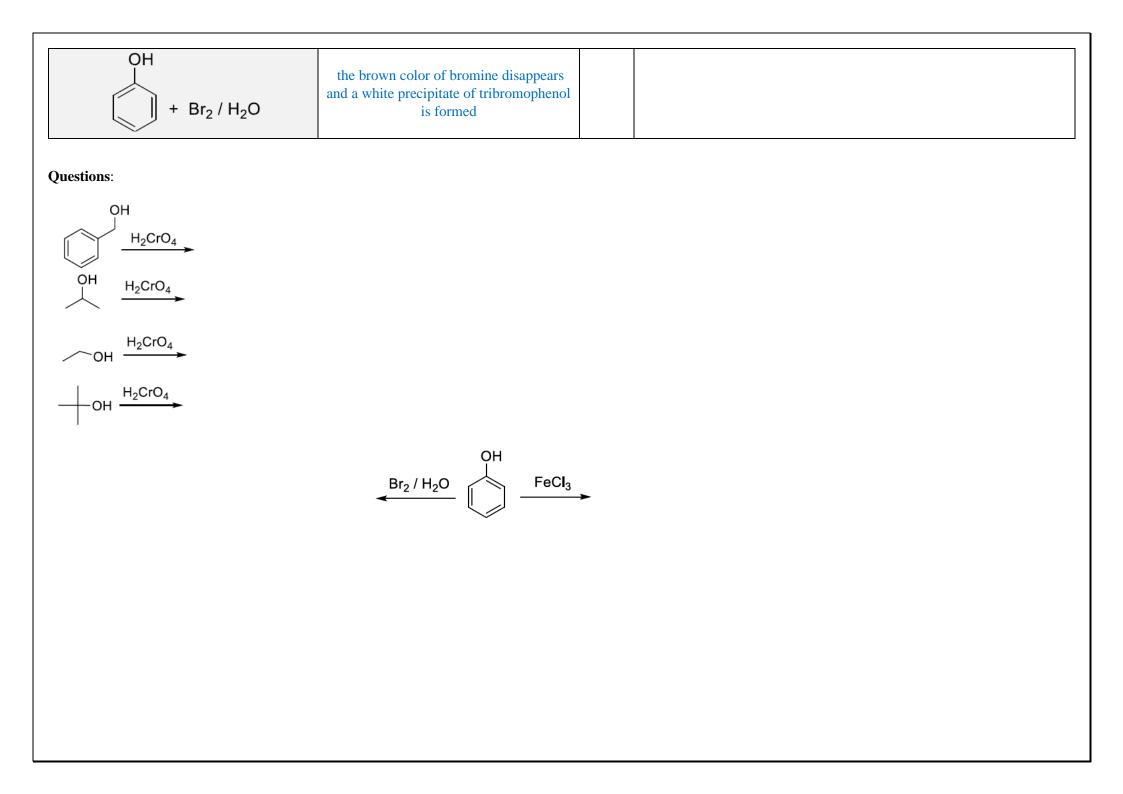
|  | <b>Laboratory R</b><br>Experiment 5: Hydroxy Con | eport (109 chem)<br>npounds (Alcohols and P | henols)           |  |  |  |  |
|--|--|---|-------------------|--|--|--|--|
| Student Names:   |  |   |                   |  |  |  |  |
| Test   | Observation                                      | Result                                      | Chemical equation |  |  |  |  |
| 1 <sup>0</sup> alcohol + Conc.HCl<br>1 mL of Ethanol + 1mL of Lucas reagent +<br>heating for 1-2minutes                |  |   |                   |  |  |  |  |
| 2 <sup>0</sup> alcohol_+ Conc.HCl<br>1 mL of Isopropanol +1 mL of Lucas<br>reagent + heating for 1-2minutes            |  |   |                   |  |  |  |  |
| <b>3º alcohol + Conc.HCl</b><br>1 mL of t-butanol + 1mL of Lucas reagent   |  |   |                   |  |  |  |  |
| 1 <sup>0</sup> alcohol + KMnO <sub>4</sub><br>1mL of Ethanol + 1 drop of KMnO <sub>4</sub> +<br>heating for 1 minute   |  |   |                   |  |  |  |  |
| 3 <sup>0</sup> alcohol + KMnO <sub>4</sub><br>1mL of t-butanol + 1 drop of KMnO <sub>4</sub> +<br>heating for 1 minute |  |   |                   |  |  |  |  |
| OH<br>+ FeCl <sub>3</sub>  | give violet coloration                           |   |                   |  |  |  |  |



| Name        | class | Functional group | Molecular formula | Structure formula |
|-------------|-------|------------------|-------------------|-------------------|
| Ethanol     |       |                  |                   |                   |
| Isopropanol |       |                  |                   |                   |
| t-butanol   |       |                  |                   |                   |