Worksheet

Describe the spectroscopy characteristics of Alcohols and Phenols.

Write the following in order of increasing acidity

2-propanol, acetic acid, methanol, water, ethanol, 2-methyl-2-propanol, hydrochloric acid

Draw the resonance of phenol. How does this affect acidity?

Draw the mechanism for the following reaction

\[
\text{HO} \quad \text{OH} + \text{H}^+ 
\]

What reactants (alcohols) are needed to produce the following molecules?

Ethyl (S) - 1- methylheptyl ether

Describe the reactivity between primary, secondary and tertiary alcohols.