2. Although you won’t be using all of the compounds listed below in this experiment, it is important that you become familiar with the relative polarities of common organic solvents if you are going to perform column (and thin layer) chromatography experiments. Supply the structures of the following solvents, and rearrange them in order of increasing polarity: hexane, ethyl acetate, water, dichloromethane, ethanol, toluene, diethyl ether and acetone.

Order of increasing polarity:

- hexane: \( \text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_3 \)
- benzene:
- toluene:
- dichloromethane: \( \text{CH}_2\text{Cl}_2 \)
- diethyl ether:
- ethyl acetate:
- acetone: \( \text{CH}_3\text{C} = \text{CH}_3 \)
- ethanol:
- water: \( \text{H}_2\text{O} \)
3. Which is more polar, fluorene or fluorenone? Which would you expect to elute from the column first?

Fluorenone is more polar than fluorene and therefore fluorene should elute from the column first.