**Honors Chemistry II** Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit 5 Review

Things you need to have a thorough understanding of (all topics covered in Honors Chemistry and in this class so far are fair game):

* Hydrocarbons
  + Petroleum
  + Distillation
  + Alkanes
  + Alkenes
  + Alkynes
  + Aromatic Hydrocarbons
  + General Formulas
  + Structural Formulas
  + Saturated/unsaturated Compounds
* Nomenclature
  + Alkyl Groups
  + IUPAC Nomenclature
  + Isomers
* Other Organic Compounds
  + Alcohols
  + Aldehydes
  + Ketones
  + Acids

1. Give examples of the following functional groups:
   1. a carboxylic acid
   2. an alcohol
   3. an ether
   4. a ketone
2. Give examples of substances that are described below.
   1. (A) Lattice of positive and negative ions held together by electrostatic forces
   2. (B) Closely packed lattice with delocalized electrons throughout
   3. (C) Strong single covalent bonds with weak intermolecular forces
   4. (D) Strong multiple covalent bonds (including π-bonds) with weak intermolecular forces
   5. (E) Macromolecules held together with strong polar bonds
3. Potassium hydrogen carbonate decomposes.
4. Fluorine violently oxidizes lithium bromide.
5. An alkali metal reacts violently with water.



