

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Molecular Modeling

Ball Color	Element	Ball Color	Element	Ball Color	Element
Black	Carbon	Gray	Phosphorus	Blue	Nitrogen
Yellow	Hydrogen	Red	Oxygen	6-hole yellow or red	Sulfur
Green/Orange/Purple	Halogens				

Prelab: Define the following terms, including a sketch of what the structure looks like:

alkane          alkene          alkyne          aromatic          ether          ester          ketone          aldehyde          alcohol  
carboxylic acid    amine          hydroxyl group          carboxyl group

Data:

Compound	# bonds	# dbl	# triple	Carbon chain**	Alcohol***	Ether*	Ester*

\* – yes or no answer

\*\* – choices are: aromatic, cycloalkane, alkane, alkene, alkyne

\*\*\* – choices are: primary, secondary, tertiary

Compound	Aldehyde*	Ketone*	Carboxylic acid*	Halogenated*	Amine***	# Carboxyl	# Hydroxyl

\* – yes or no answer

\*\* – choices are: aromatic, cycloalkane, alkane, alkene, alkyne

\*\*\* – choices are: primary, secondary, tertiary