**Pre Test** Organic Chemistry and Polymers

Name____________________________

1. Organic Chemistry is the study of ________________.

2. What is the difference between an alkane, alkene and alkyne?

3. Label the following as cis- or trans- isomers with respect to chlorine:

\[
\begin{align*}
\text{cis} & : \quad \begin{array}{c}
\text{Cl} \\
\text{Cl} \\
\text{H} \\
\text{C}\equiv\text{C} \\
\text{H}
\end{array} & \quad \begin{array}{c}
\text{H} \\
\text{Cl} \\
\text{Cl} \\
\text{C}\equiv\text{C} \\
\text{H}
\end{array} \\
\text{trans} & : \quad \begin{array}{c}
\text{Cl} \\
\text{H} \\
\text{C}\equiv\text{C} \\
\text{H} \\
\text{Cl}
\end{array} & \quad \begin{array}{c}
\text{H} \\
\text{Cl} \\
\text{C}\equiv\text{C} \\
\text{H} \\
\text{Cl}
\end{array}
\end{align*}
\]

4. Draw the general structure of an ester:

5. List several objects that you use each day that is made up of polymers.

6. Define the term “polymer”.

7. Give one example of a naturally found polymer.
Pre Test (with answers) Organic Chemistry and Polymers

Name____________________________

1. Organic Chemistry is the study of ________________.
   Carbon containing compounds

2. What is the difference between an alkane, alkene and alkyne?
   Alkane: single bond
   Alkene: double bond
   Alkyne: triple bond

3. Label the following as cis or trans isomers with respect to chlorine

   \[\text{cis} \quad \text{Cl} \quad \text{Cl} \quad \text{H} \quad \text{H} \quad \text{trans}\]

4. Draw the general structure of an ester:

   ![Ester Structure]

5. List several objects that you use each day that is made up of polymers.
   Plastic bottles, rubber bands, chewing gum, etc.

6. Define the term “polymer”.
   Is a large molecule, or macromolecule, composed of many repeated subunits.

7. Give one example of a naturally found polymer.
   Rubber