Petroleum—A Source of Organic Compounds

Directions: For each of the following write the letter of the term or phrase that best completes the sentence.

1. Fossil fuels include all of the following EXCEPT ______.
   a. coal         b. oxygen         c. natural gas       d. petroleum

2. Petroleum compounds can be separated because their ______ differ.
   a. fossils       b. benzene rings   c. boiling points    d. densities

3. A structure used to separate petroleum compounds is called a(n) ______.
   a. double helix   b. oil derrick     c. centrifuge       d. fractionating tower

4. Petroleum fractions with the ______ may never condense and are collected as gases.
   a. lowest boiling points    b. highest boiling points
   c. longest polymer chains   d. largest benzene rings

5. Petroleum fractions with 5 to 10 carbons are used to make ______.
   a. lubrication grease       b. kerosene        c. gasoline        d. asphalt

6. A gas that comes from petroleum is ______.
   a. octane       b. diesel fuel     c. ethanol          d. propane

7. A large molecule that consists of two or more monomers is called a ______.
   a. fraction      b. polymer        c. fossil           d. dye

8. Polyethylene is used to make ______.
   a. shopping bags   b. jet fuel       c. saccharin
   d. printers ink

9. Two or more different monomers will link to form a(n) ______.
   a. epoxy glue     b. aspirin        c. copolymer
   d. natural gas

10. A synthetic dye discovered accidentally in coal tar is ______.
    a. indigo         b. propane       c. butane
    d. mauve
Directions: Write the term that matches each description below in the spaces provided. The boxed letters should spell the term that answers question 8.

1. a lipid that is needed for building cell membranes, but can lead to heart disease in large amounts
2. a large chainlike molecule such as polyethylene or polypropylene
3. a type of biological compound made up of nucleotides
4. a source of organic compounds that is also known as crude oil
5. a monomer of a protein molecule
6. a type of nucleic acid that stores genetic information in the nuclei of cells
7. a carbohydrate that is made up of monomers of sugar
8. What property allows chemists to separate gasoline from asphalt and paint thinner from jet fuel?