HYDROCARBON COMPOUNDS

Chapter Quiz

Classify each of these statements as always true, AT; sometimes true, ST; or never true, NT.

- 1. Hydrocarbons are unsaturated. 22.2
- **2.** The IUPAC name for $CH_3(CH_2)_3CH_3$ is butane. 22.1
- 3. When naming branched-chain alkanes, the rule is to list the names of 22.1 the alkyl substituents in order of their placement in the molecule.
- **4.** Compounds that have the same molecular formula but the atoms are 22.3 joined in a different order are called structural isomers.
- **5.** Hydrocarbons are organic compounds that contain hydrogen, carbon, 22.1 and oxygen.
- **6.** A benzene ring is represented as a pentagon. 22.4
- 7. A benzene ring contains 6 carbon atoms and 12 hydrogen atoms. 22.4
- **8.** Cracking is a controlled process by which hydrocarbons are broken 22.5 down or rearranged into smaller, more useful molecules.
- **9.** Coal is more than 80 percent carbon. 22.5
- **10.** Methylbenzene is the IUPAC name for toluene. 22.4
- 11. Name this compound: 22.2

12. Draw the structural formula for 1,2,4-triphenylpentane.

22.4