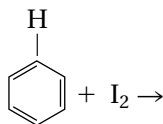


23

FUNCTIONAL GROUPS AND ORGANIC REACTIONS

Chapter Quiz

1. Write an equation using structural formulas for the reaction of benzene and iodine. 23.1



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

- _____ 2. The symbol R is used to represent functional groups. 23.1
- _____ 3. Methyl chloride and chloromethane are the same compound. 23.1
- _____ 4. Alcohols are soluble in water. 23.2
- _____ 5.
$$\begin{array}{c} \text{H} \\ | \\ \text{R}-\text{C}-\text{OH} \\ | \\ \text{H} \end{array}$$
 is the formula for a primary alcohol. 23.2
- _____ 6. The reaction of methane and chlorine produces a mixture of mono-, di-, tri-, and tetrachloromethanes. 23.1
- _____ 7. Aldehydes and ketones form intermolecular hydrogen bonds. 23.3
- _____ 8. The hydrogenation of a double bond is an oxidation reaction. 23.3
- _____ 9. R-O-R is the general formula of an ether. 23.2
- _____ 10. The addition of water to an alkene is a hydrogenation reaction. 23.2
- _____ 11. Compounds containing a carbonyl group are carboxylic acids. 23.3
- _____ 12. The more reduced a carbon compound is, the more energy it can release upon its complete oxidation to carbon dioxide. 23.3
- _____ 13. Monomers are molecules that combine to form the repeating unit of a polymer. 23.4
- _____ 14. The abbreviated formula for a carboxylate ester is RCOOR. 23.3
- _____ 15. The formation of polyester is an example of condensation polymerization. 23.4
- _____ 16. The oxidation of an alcohol produces a ketone. 23.3