

CHAPTER 12 LEARNING OBJECTIVES

1. Describe how petroleum is refined, how the various fractions are separated
2. Distinguish between straight-chain and branched hydrocarbons and explain their effects on gasoline quality (octane number and knocking).
3. Recognize the following organic functional groups: amines, carboxylic acids, alcohols, esters, and amides.
4. Define the terms polymer, monomer, and repeat unit.
5. Draw polymers formed from monomers via addition and condensation polymerizations.
6. Explain the differences between a thermoplastic and thermoset.
7. Describe polymeric crosslinking and explain how it affects polymer properties.

Review the “In Closing” and “Key Terms” sections (pages 599-600).