Section Review

SECTION: NATURAL RESOURCES

1. Sample answer: A natural resource is any natural material that is used by humans. Renewable resources can be replaced at the same rate at which they are consumed. Nonrenewable resources form at a rate much slower than the rate at which they are consumed. Recycling is the process of recovering valuable materials from waste or scrap.
2. Humans consume most natural resources by using products made from the resources.
3. B
4. Sample answer: We can conserve natural resources by using them only when necessary, by reusing them whenever possible, and by recycling them.
5. 3.3 L/h × 8.6 h = 28.38 L
6. Answers may vary. Students should note that most human activity affects Earth's resources.
7. Sample answer: aluminum cans, milk jugs, glass bottles, paper, and plastic bottles
8. Sample answer: The population is significantly larger now than it was 100 years ago, so many renewable resources are being used at a much faster rate than they were used in the past. As these resources become harder to find, people may begin to use renewable resources.

SECTION: FOSSIL FUELS

1. Sample answer: An energy resource is a resource that humans use to produce energy. Fossil fuels are formed from the remains of organisms that lived long ago. Petroleum is a liquid mixture of complex hydrocarbon compounds. Natural gas is a mixture of gaseous hydrocarbons. Coal is formed from partially decomposed plant material. The combination of sulfur dioxide and water vapor produces acid precipitation. Smog is a petrochemical haze that forms when sunlight acts on industrial pollutants and burning fuels.
2. B
3. Coal is a solid fossil fuel, petroleum is a liquid fossil fuel, and natural gas is a gaseous fossil fuel.
4. Sample answer: Petroleum and natural gas both form when microscopic sea organisms die, settle to the ocean floor, and decay. The remains of organisms are buried, and after millions of years of pressure and heat they become natural gas and petroleum.
5. We obtain petroleum and natural gas by drilling wells into rock formations that contain these resources.
6. Answers may vary. Students may mention oil spills, loss of soil from strip mining coal, acid rain, the production of smog due to burning fossil fuels, and increasing atmospheric CO_2.
7. Petroleum and natural gas form underwater from the decayed remains of aquatic microorganisms. Coal forms on land from partially decayed plant matter.
8. Answers may vary. Accept any well-supported answer.
9. the Middle East
10. $500,000,000,000 × 0.06 = $30,000,000,000

SECTION: ALTERNATIVE RESOURCES

1. Sample answer: The energy released by fission or fusion is nuclear energy. Solar energy is produced by the sun. Using a windmill to drive an electric generator is called wind power. Electrical energy produced by falling water is hydroelectric energy. Biomass is organic matter that can be used as a source of energy. Gasohol is a combination of alcohol and gasoline. Geothermal energy is produced by using heat within the Earth to produce hot water or steam.
2. A
3. Solar energy can be used for heating or used to produce electricity.
4. Hydroelectric energy production is practical in areas in which there are large rivers.
5. Sample answer: Burning biomass and converting plant material to alcohol that can be burned are two ways to release biomass energy.

Original content Copyright © by Holt, Rinehart and Winston. Additions and changes to the original content are the responsibility of the instructor.