Content Practice A

LESSON 2

Energy Transfer in the Atmosphere

Directions: On the line before each statement, write T if the statement is true or F if the statement is false.

- 1. Ninety-nine percent of the radiation from the Sun consists of visible light, ultraviolet light, and infrared light.
 - **2.** Ultraviolet radiation has longer wavelengths than visible light.
- **3.** About 40 percent of incoming radiation is absorbed by gases and particles in the atmosphere.
- **4.** The ozone layer is located in the stratosphere.
- **5.** Solar radiation absorbed at Earth's surface is reemitted as infrared radiation.
- **6.** Without the greenhouse effect, Earth would be much warmer.
 - 7. The transfer of thermal energy by the movement of matter from one place to another is called convection.
- **8.** When ice melts, it releases thermal energy.
- **9.** When warm air rises, thermal energy is transferred to the atmosphere by conduction.
 - **10.** Temperature inversions result from stable atmospheric conditions.

Content Practice B

LESSON 2

Energy Transfer in the Atmosphere

Directions: On each line, write the phrase that correctly completes each sentence.

- 1. Ninety-nine percent of the radiation Earth receives from the Sun
- **2.** About 20 percent of the radiation from the Sun is _____
- **3.** About 25 percent of radiation from the Sun is _____
- **4.** About 5 percent of the radiation from the Sun _____
- **5.** About 50 percent of the Sun's rays _____
- **6.** Absorbed radiation is reemitted as _____

Directions: Respond to each statement on the lines provided.

7. Explain what *radiation balance* means.