

REVIEW

7

SECTION 7.3

Dangers and Benefits of Nuclear Radiation

1. **Select** the correct answer(s): People receive some natural or background radiation exposure each day from _____.
 - a. the sun
 - b. radioactive elements in the soil and rocks
 - c. household appliances such as television sets and microwave ovens
 - d. medical and dental X rays
 - e. the human body itself
 - f. All of the above
2. **Determine** whether the following statements are true or false.
_____ a. The longer a person is exposed to radiation and the closer the person is to the radiation, the greater the risk.
_____ b. Radiation cannot be detected by our sense of sight, smell, taste, hearing, or touch.
_____ c. Alpha particles gain energy as they ionize matter.
3. **Explain** why ventilation is very important if there is a risk of exposure to radon gas in your home or school.

4. **Name** the nuclear radiation(s) that can be easily stopped by skin or clothes.

5. **Explain** ionization. Which forms of nuclear radiation are capable of ionizing matter?

6. **Explain** how nuclear radiation can be harmful to DNA in living things, including humans. Explain why damage to the DNA is extremely dangerous.

