

1. Radioactive atoms

- A. give off surplus energy by emitting radiation.
- B. are unstable.
- C. change or decay until they become stable.
- D. all of the above.

2. Sources of ionizing radiation that contribute to the dose received each year by the average American are:

(enter True or False next to each entry)

- A. medical x-rays _____
- B. cosmic rays from the sky above _____
- C. the earth below us _____
- D. food we eat _____
- E. our own bones _____
- F. modern luminous watch dials _____

3. Which of the following consumer items can contribute to radiation exposure?

- A. cigarettes
- B. camping lantern mantles
- E. dental ware (crowns, dentures)
- C. fertilizer
- D. natural gas cooking
- F. All of the above

4. Caution should be used by workers handling highly radioactive materials. Choose the method(s) workers can minimize their exposure to radiation dosage.

- A. Minimize the time spent near the radioactive material.
- B. Maximize the distance between the radioactive material and the worker.
- C. Use shielding between the radioactive material and the worker whenever possible.
- D. All of the above.
- E. None of the above.

5. Radon, the radioactive gas that contributes more than half the yearly dose to the average American, has a half-life of approximately four days. How long does it take a sample containing radon to decay to one-eighth

(1/8) of its original level of radioactivity?

- A. 2 days
- D. 12 days
- B. 4 days
- E. 16 days

C. 8 days

6. True or False:

Giant spiders, mutant crabs, and other fearsome creatures are the product of the special effects department of Hollywood — not radiation. In other words, the effects of radiation are not unique. There are no detrimental health effects caused by radiation that cannot also be caused by one or more physical, chemical, or biological agents.