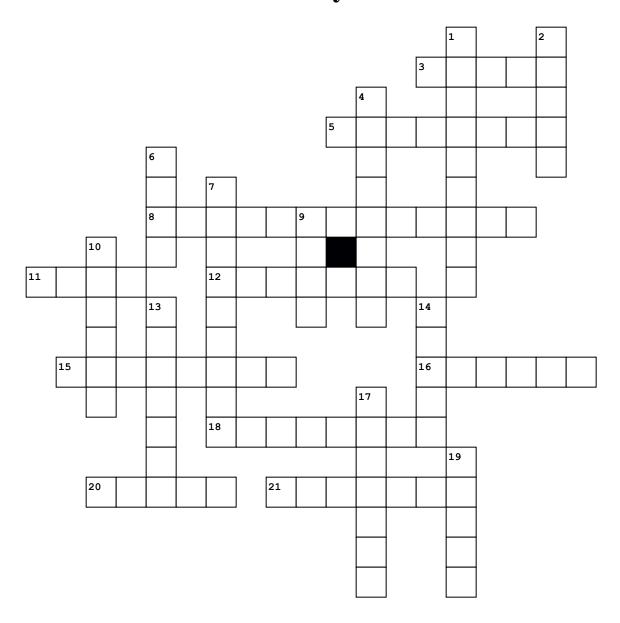
## **Radioactivity Review**



## Across

- **3.** This type of radiation particle is capable of penetrating only the very outer layer of living skin cells.
- **5.** The charge on an alpha particle
- **8.** The breakdown of an unstable, radioactive element from a parent element into a daughter element.
- 11. Common shield for gamma waves.
- **12.** This occurs when an unstable nucleus breaks down into two smaller nuclei and releases energy.
- **15.** The charge on a beta particle.
- **16.** using the known half-life and proportions of a sample to determine the age of something.

## Down

- 1. This is a heavy element which can fission. It undergoes beta decay to become Americium.
- 2. This common material can shield alpha particles.
- **4.** A particle that is the antimatter opposite of an electron.
- **6.** This type of radiation causes the most damage once it gets inside the body.
- 7. The time period during which a radioactive isotope decays to half its value is called this.
- **9.** this doesn't change with beta particle emission.
- **10.** This chronic health effect can occur due to radiation exposure.

- 18. a beta particle
- **20.** This type of radiation can pass through the body sometimes causing health effects.
- **21.** One of two or more forms of the same element.
- **13.** This element is a common alpha particle emitter.
- **14.** This type of naturally-occurring radioactive gas is the most common cause of lung cancer in non-smokers.
- **17.** This is a highly radioactive man-made gas. It is an isotope of hydrogen and sometimes found in heavy water.
- **19.** The breakdown of an unstable, radioactive element from a parent element into a daughter element.