Research the uses for radioactivity. Create a product (brochure, presentation, or report) that describes how radiation is used in our world. Your assignment must include examples for each type of radiation studied in this unit: alpha, beta plus (positron), beta minus (electron), and gamma.

**Suggested Resources:**

[United States Nuclear Regulatory Commission: Uses of Radiation](http://www.nrc.gov/about-nrc/radiation/around-us/uses-radiation.html)

[United States Nuclear Regulatory Commission: Uses of Radiation Lesson Plan](http://www.nrc.gov/reading-rm/basic-ref/teachers/unit2.html)

[Radiation Answers: Sources and Uses](http://www.radiationanswers.org/radiation-sources-uses.html)

[International Atomic Energy Agency: Medical Uses of Radiation](http://www.iaea.org/Publications/Booklets/RadPeopleEnv/medical.html)

[Center for Molecular Imaging Innovation and Translation: Beneficial Medical Uses of Radiation](http://www.molecularimagingcenter.org/index.cfm?PageID=7083)

[Environmental Protection Agency: Alpha Particles](http://www.epa.gov/radiation/understand/alpha.html)

[Environmental Protection Agency: Beta Particles](http://www.epa.gov/rpdweb00/understand/beta.html)

[Environmental Protection Agency: Gamma Rays](http://www.epa.gov/rpdweb00/understand/gamma.html)

**Criteria:**

1. Describes what each particle is and where they come from.
2. Illustrates a typical reaction equation for each type of decay.
3. Describes two uses for each type of radiation.
4. Diagrams and images are used to aid reader understanding
5. You will need to use resources outside of this course to complete this assignment, so please submit a Works Cited document with your assignment submission. If you need assistance, visit the Developmental Module for information on citing any resources that you used.

**Checklist:**

As you complete your radioactivity assignment, please review the checklist below to ensure that you have included all needed items.

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| --- | --- |
| ***Your assignment should include all of the criteria listed below to receive full credit.*** | |
| **Included?** | **Item** |
|  | 1. Describes what each particle is and where they come from. |
|  | 1. Illustrates a typical reaction equation for each type of decay. |
|  | 1. Describes two uses for each type of radiation. |
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| **Included?** | **Item** |
|  | For resources used outside of the course, a Works Cited document is submitted along with the assignment. |