

Nuclear Materials



Guiding Questions

How did radioactivity get discovered?

Which elements are radioactive? Make sure to indicate their location on the periodic table.

What is radioactive decay? Differentiate among alpha, beta, and gamma emission. Compare their ability to penetrate the human body.

How does radiation affect the human body?

What sources of radiation are people exposed to in their everyday lives? What is the average human exposure to radiation?

What is high level and low level nuclear waste? Give examples of each.

What is Yucca Mountain's connection to nuclear chemistry?

How many steps between U-238 and Rn-222 in a Uranium decay series?

Opinion: Should all nuclear substances be banned? Justify your answer

Links to get Started

<http://www2.lbl.gov/abc/Basic.html>

<https://www.nrc.gov/about-nrc/radiation/rad-around-us.html>

https://chem.libretexts.org/Core/Physical_and_Theoretical_Chemistry/Nuclear_Chemistry/Radioactivity/Discovery_of_Radioactivity

<http://chemistry.about.com/od/nuclearchemistry/a/List-Of-Radioactive-Elements.htm>