

Radioactivity & Nuclear Reactions Review

I can use correct terminology to describe radioactivity and nuclear reactions.

List three facts about alpha radiation.

List three facts about beta radiation.

List three facts about gamma radiation.

What is background radiation? What is the largest source of background radiation?

How can you tell if an element is radioactive?

What happens when the nuclear strong force is NOT strong enough to hold the nucleus together?

List three facts about nuclear fission.

List three facts about nuclear fusion.

When does a chain reaction occur?

I can use half-life to determine information about a radioactive element.

Element P has a half-life of 10 minutes. You will start with 100 g and create a "decay" diagram showing its decay over 5 half lives and then use the diagram to answer the following questions.

Decay Diagram

- How much is left after one half life?
- How many grams remain after 5 half lives?
- How many minutes does it take to go through 5 half lives?
- Would any of Element P remain after 200 minutes? Approximately how much?

I can solve nuclear equations.

