Chem 36.1

Calculate the masses and atomic numbers in nuclear chemistry equations, predict the products of nuclear reactions

Review: types of radiation (alpha, beta, gamma)

Guided practice:

Uranium-238 alpha decay → Thorium-234 and Helium-4

Carbon-14 beta decay → Nitrogen-14 and beta particle

Practice: kahoot

HW: Define "Half-Life" as both a scientist and a gamer

Chem 36.2

Goals: Calculate the half-lives of radioactive isotopes or determine how much

Guided example: Discuss in small groups how to solve this problem

➢ A mystery element starts at as a pure substance (100%). It is noted that in two hours, the substance is now only 6.25% pure. What is the time for the half-life of this substance?
➢ If 200 g of a substance has a half-life of 2.5 years, how much would you expect to be left after 10.0 years?

HW: half-life kahoot