

Nuclear Chemistry Practice Sheet

Using your knowledge of nuclear chemistry, write the equations for the following processes:

- 1) The alpha decay of iridium-174
- 2) The beta decay of platinum-199
- 3) Positron emission from sulfur-31
- 4) Krypton-76 undergoes electron capture
- 5) Write the symbols for an alpha particle, beta particle, gamma ray, and positron.
- 6) If the half-life for the radioactive decay of zirconium-84 is 26 minutes and I start with a 175 gram sample, how much will be left over after 104 minutes?
- 7) Why is it difficult to make a fusion reaction occur?