

Nuclear Chemistry Worksheet

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

- 1) The alpha decay of radon-198
- 2) The beta decay of uranium-237
- 3) Positron emission from silicon-26
- 4) Sodium-22 undergoes electron capture
- 5) What is the difference between nuclear fusion and nuclear fission?
- 6) How does gamma radiation change the atomic number and/or mass number of a nucleus?
- 7) Name three uses for nuclear reactions.

HALF LIFE

- 8) How much of 30.0 grams of a substance will be left after 2 hours if the half-life is 15 minutes. (answer in grams)
- 9) The half-life of cobalt 5.26 years. If 25 g are left after 40.35 days, how many grams were in the original sample?
- 10) How many days will have passed if a substance has a half-life of 120 days and 50% of the substance remains?

Half Life Chemistry Nuclear Packet Answers

D Kirk



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