

Name _____ block ____ date _____

Summary of Radioactive Decay

Type of Decay	Symbol	Charge	What occurs	Stopped by

1. What causes a nucleus of an atom to be unstable and emit radiation?
2. Phosphorus-32 has a half-life of 14.3 days. How many days will it take for a radioactive sample to decay to 1/8 its size?
3. Iodine-131 has a half-life of 8.0 days. How many grams of an original 160 mg sample will remain after 40 days?
4. How many days must elapse for a 0.80 mg sample of iodine-131 in the thyroid to decay to 0.10 g.
5. The half-life of potassium-42 is 12.4 hours. How much of a 750 g sample would remain after 62.0 hours?