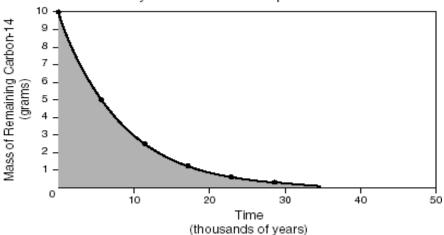
Name:	
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## Half-Life Worksheet L

Decay of a 10-Gram Sample of Carbon-14

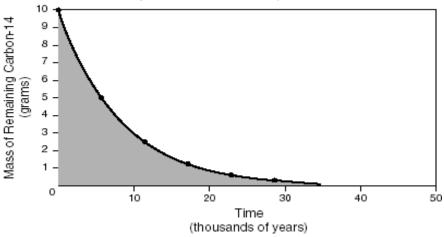


- 1. According to the graph, what is the approximate half-life of carbon-14?
  - A. 5.7 years

- B. 5,700 years
- C. 23,000 years
- D. 1,000,000 years
- 2. What is half-life? \_\_\_\_\_
- 3. What type of Carbon in used in Carbon dating?
- 4. If you have 200 grams of radioactive Polonium with a half life of 50 years. How much is left after 50 years?
  - a. How much is left after 100 years?
  - b. How much is left after 150 years?

## Half-Life Worksheet L

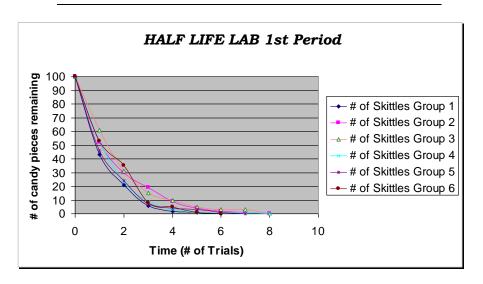
Decay of a 10-Gram Sample of Carbon-14



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	c. How many half lives did it take to get to 50 grams?	
5.	What are the three types of nuclear decay?	
6.	What can each type of nuclear decay be stopped by?	
7.	The half-life of radium-222 is 38 seconds. If you had a 12 gram sample, how much would be left after 76 seconds? 114 seconds?	
8.	Sodium 24 has a half-life of 10 hours. You begin with a sample of 50 grams. It begins to decay. How much Sodium 24 would you have after 10 hours? 30 hours? 50 hours?	
9.	What trend do you notice in the following graph?	



	c. How many half lives did it take to get to 50 grams? _
5.	What are the three types of nuclear decay?
6.	What can each type of nuclear decay be stopped by?
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9.	What trend do you notice in the following graph?

