Name: _____

Date: _____ Period: _____

Geologic Time

Earth Science

Supplemental: Absolute Dating I

Directions: Fill in data table below for C-14 and it's daughter element N-14. After the table is complete, answer questions 12 and 13.

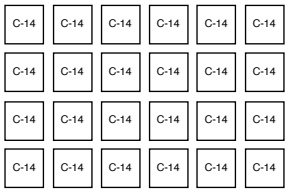
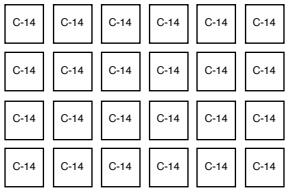
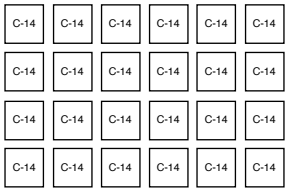
Half-life	Original Mass of C-14 (grams)	Mass of N-14 (grams)	Number of Years
0	48	0	0
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

1. How much carbon-14 would have been left after 22,800 years?

2. After ten half-lives, why is C-14 not a reliable method used to date organic remains?

Supplemental: Absolute Dating I

Directions: Complete the chart below, which represents a model of a radioactive sample with a half-life of 5,700 years. The boxes labeled carbon-14 represent an undecayed radioactive material. After each half-life shade in the appropriate number of boxes to represent the decayed nitrogen-14.

Half-life	Number of Years	Unstable C-14	Stable N-14	Radioactive Sample
0	0	24 g	0 g	
1				
2				
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