

Name: _____

Date: _____ Period: _____

Supplemental: Absolute Dating

Directions: Fill in data table below for C-14 and its daughter element N-14. After the table is complete, answer the following questions.

Half-life	Percentage of Unstable C-14	Percentage of Stable N-14	Number of Years
0	100%	0%	
1			
2			
3			
4			
5			

1. What will occur to the half-life of the rock sample containing carbon-14 if it is crushed and heated?

2. If the amount of carbon-14 in the original sample had been 100 grams, about how much nitrogen-14 would there be after 28,500 years?

3. If the data was extrapolated, would the percentage of unstable C-14 ever reach 0 percent?

Supplemental: Absolute Dating

Directions: Fill in data table below for C-14 and its daughter element N-14. After the table is complete, answer the following questions.

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

1. If the amount of carbon-14 in the original sample had been 48 grams, about 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?