Radiometric Dating Worksheet Name:

Isotopes Frequently Used in Radiometric Dating		
Radioactive Parent	**Stable Daughter Product**	**Half Life Values**
U-238	Pb-206	4.5 Billion Years
U-235	Pb-207	713 Million Years
Th-232	Pb-208	14.1 Billion Years
Rb-87	St-87	47 Billion Years
K-40	Ar-40	1.3 Billion Years
C-14	N-14	5730 Years

1. What fraction of the original C-14 remains in a sample after 11,460 years?

2. How many half-lives have elapsed to yield a sample with 125 atoms of C-14 and 375 atoms of N-14?

3. How old is a sample that contains 25% of its original K-40?

4. How old is a sample that contains a U-235 to Pb-207 ratio of 1:6?

5. How old is a sample that contains 125 atoms of U-235 and 375 atoms of Pb-207?

6. An Anthropologist claims that a specimen he uncovered is 30,000 years old. It contains a ratio of C-14 to N-14 of 1:7. Is his claim valid?

Fossil Station Lab: **Name**

Examine each specimen and determine what type of fossilization you are viewing. (Cast, Mold, Recrystallization, Petrification, Coprolites, Carbonization, Gastrolith, Entombed, Refrigeration, Mummification, Burrow, Trace, Altered, Unaltered)

Number	Specimen	Type of Fossil
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		