**SOIL 4234 Laboratory #8**

**Carbon, Nitrogen, and Organic Matter Pre-Lab (5 points)**

**Due Wednesday, October 9th at the beginning of lab**

Student

Lab

TA

1. List three reasons why soil organic matter (SOM) is important in the soil. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. List two reasons why estimating SOM by the loss on ignition (LOI) method is advantageous over the Walkey-Black Method.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. List three constituents of soil that cause errors when estimating SOM by the dry combustion technique?
2. The method for estimating SOM that measures oxidizable soil organic carbon (SOC) by oxidation with potassium dichromate (K2Cr2O7) is:
3. Soil Color Analysis
4. Loss On Ignition
5. Dry Combustion
6. Walkey-Black Method
7. The process of converting or transforming N from organic compounds to inorganic compounds is called:
   1. Immobilization
   2. Mineralization
   3. Denitrification
   4. Volatilization