**Advanced Chemistry**

**Weighing by Counting Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Average Atomic Mass Date \_\_\_\_\_\_\_\_\_\_\_ Block \_\_\_\_\_\_\_**

1. Look at the container of kernels at the front of the classroom. How would you determine the number of kernels in the container?



1. See the diagram below and the percent compositions given to calculate the average atomic mass for carbon and hydrogen.



Hydrogen 1H 99.9885%

Deuterium 2H 0.115%

Tritium 3H \*

12C 98.93%

13C 1.07%

14C \*

Explain why carbon has an average atomic mass of 12.01 and hydrogen has an average atomic mass of 1.008 even though they both have three isotopes.

\* Negligible percent

3..Calcualte the average atomic mass for potassium given the information below.

39K 93.2581%

40K 0.0117%

41K 6.7302%

Average atomic mass = \_\_\_\_\_\_\_\_\_\_ Compare to the value on the periodic table.