THE AVERAGE ATOMIC MASS OF BEANIUM

Purpose: To analyze the isotopes of beanie and
To calculate its average "atomic" mass.

Materials:

* Sample of beanie
* balance

Procedure:

1. Obtain a sample of beanie.
2. Separate the three "isotopes" (black beans, red beans, and popcorn).
3. Measure the mass of each isotope on the balance.
4. Count the numbers of black beans, red beans, and popcorn kernels.
5. Record your data in the table below:

		Black beans	Red beans	Popcorn kernels	Total
A	Mass (grams) of isotope				
B	Number of beans				
C	Average mass (grams) (A ÷ B)				
D	Relative abundance (B ÷ total # of beans)				
E	Percent abundance (D x 100)				
F	Relative mass (C x D)				

Questions:

1. Why does the total you recorded for average mass in row C differ from the total you recorded for the mass in Row F?

2. Which is the "correct" average mass (Row C or Row F)? Why?