Find the Average Mass of Benium

Problem

Today in our lab we are going to take a sample of different types of beans. Each type of bean is to represent a different isotope of the element Beanium(Bm). You will notice that each bean type (isotope) has a different mass and abundance in your sample.

You are asked to:

* **Find the average mass of the beans.**

Hint: It will help if you also find:

* Find the relative abundance or % of each bean type in the sample
* Find the average mass of each bean type

Materials

* Sample of beans containing 3 different types
* Electronic balance
* Plastic bag

Procedure

1. I am not going to tell you how to do this lab but I do have one rule for you:
   1. You cannot mass your total sample at any time unless you are checking your answer

Hint number 2: you will want to create a chart to put your data in.

1. When you think you have your answer check it by weighing your whole sample and dividing it by the total number of beans.

Questions:

1. How did you approach this experiment? ie. What was the first problem that you encountered and how did you solve it?
2. Why do you think you cannot just average the masses of the 3 different types of beans to get the average atomic mass of benium?
3. Write up a brief procedure on how you did the experiment.