

Questions on Definite and Multiple Proportions I

1) Consider the following table of data:

Compound	Mass Na	Mass Z	Formula
A	12	2.44	Na ₃ Z
B	3.45	.700	??
C	14	????	Na ₃ Z
D	25.0	30.47	??

- a) Do the data for compounds A and B support that they are the same compound? Explain
- b) For compound C, calculate the number of g of Z in the compound
- c) Prove that compound D is **different** than compound A.
- d) How many times more does **one Na** weigh than **one Z**?
- e) If the mass of Na is 23 on the periodic table, what is the mass of Z on the PT?
- f) *Show that the data for compounds D and B satisfy the law of **multiple proportions**. This will be done in class. Do not do part f for Homework!!!*

2) Let's say you have two elements on the periodic table labeled D and E. How would you properly write the formulas for a compound with:

- a) One D
- b) Two E's
- c) Three D's and Four E's

