EXPERIMENT 1: CONSTANT COMPOSITION   -
                          The Law of Constant Proportions: Nu   and   B

D A T A   S H E E T

1. PACKET # _____   # OF Nu:_____   # OF B:_____

2. mass of B: _____ g

4. mass of NuB synthesized: _____ g

5. mass of excess B: _____ g

6. mass of reacted B: _____ g

7. mass of reacted Nu   =
   mass of NuB formed   _____

8. How does the above ratio compare with the ratio obtained by other groups?

9. Does this ratio depend on the amount of mass you were given to work with? Explain.

10. Does this model agree with the Law of Constant Proportions? Explain.

11. Would the ratio from # 7 have been the same if the nuts were heavier? Explain.

12. How does the mass of the elements reacted compare to their mass before they reacted? What law does this suggest?

EXPEBIMENT 2:

2.   mass of Nu_2B synthesized: _____ g

3.   mass of reacted B: _____ g

mass of reacted Nu: _____ g

4.   what mass of Nu would combine with 100 g of B? (Nu_2B)

$$\frac{\text{mass of reacted Nu}}{\text{mass of reacted B}} = \frac{\text{mass of Nu}}{100 \text{ g of B}}$$

5.   (from experiment 1)
what mass of Nu would combine with 100 g of B? (NuB)

$$\frac{\text{mass of reacted Nu}}{\text{mass of reacted B}} = \frac{\text{mass of Nu}}{100 \text{ g of B}}$$

6.   how does your answer in #4 compare with your answer in #5?   Explain.

Part 2:

1.   mass of Nu_3B synthesized: _____ g

2.   mass of reacted B: _____ g

     mass of reacted Nu: _____ g

3.   what mass of Nu would combine with 100 g of B? (Nu_3B)

$$\frac{\text{mass of reacted Nu}}{\text{mass of reacted B}} \quad = \quad \frac{\text{mass of Nu}}{100 \text{ g of B}}$$

4.   how does the answer to the previous question compare with answers 4 and 5 from part 1?

fill in the data from expts 1 and 2 (parts 1 and 2) below

	NuB	Nu_2B	Nu_3B
mass of reacted Nu (g)			
mass of reacted B (g)			
mass of compound synthesized (g)			
mass of Nu that would combine with 100 g B			