MP - Mr. Nicastro Name_____
Lab Activity _____
Block_____ Date_____ _____

EXPERIMENT 1: CONSTANT COMPOSITION -
The Law of Constant Proportions: Fs and R

D A T A S H E E T

1.PACKET # _____ # OF Fs:_____ # OF R:_____

2. mass of Fs: _____ g

4. mass of FsR synthesized: _____ g

5. mass of excess Fs: _____g

6. mass of reacted Fs: _____ g

7. $\frac{\text{mass of reacted R}}{\text{mass of FsR formed}}$ = _____

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 rings were heavier? Explain.

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

EXPERIMENT 2:

2. mass of FsR_2 synthesized: _____ g

3. mass of reacted Fs: _____ g

mass of reacted R: _____ g

4. what mass of R would combine with 100 g of Fs? (FsR_2)

$$\frac{\text{mass of reacted R}}{\text{mass of reacted Fs}} = \frac{\text{mass of R}}{\text{100 g of Fs}}$$

5. (from experiment 1)
what mass of R would combine with 100 g of Fs? (FsR)

$$\frac{\text{mass of reacted R}}{\text{mass of reacted Fs}} = \frac{\text{mass of R}}{\text{100 g of Fs}}$$

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

Part 2:

1. **mass of FsR_3 synthesized: _____ g**

2. **mass of reacted Fs: _____ g**

   mass of reacted R: _____ g

3. **what mass of R would combine with 100 g of Fs? (FsR_3)**

$$\frac{\text{mass of reacted R}}{\text{mass of reacted Fs}} = \frac{\text{mass of R}}{\text{100 g of Fs}}$$

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

	FsR	FsR_2	FsR_3
mass of reacted R (g)			
mass of reacted Fs (g)			
mass of compound synthesized (g)			
mass of R that would combine with 100 g Fs			