CONCEPT: NAMING BINARY MOLECULAR COMPOUNDS

- **Binary Molecular Compounds**: molecular compounds contain ___ different elements. Ex: H_2O or NO.
  - □ *Numerical prefixes* are always required because these compounds can combine in different proportions.

Numerical Prefixes									
Mono	1	Di	2	Tri	3	Tetra	4	Penta	5
Hexa	6	Hepta	7	Octa	8	Nona	9	Deca	10

Rules for Naming Binary Molecular Compounds

STEP 1: The first nonmetal is named normally and uses all numerical prefixes except _____.

STEP 2: The second nonmetal keeps its base name, uses any numerical prefix, and has its ending changed to _____.

- □ When naming, if the letter "a" of the numerical prefix is next to a letter "o" we can just drop the letter "a".
  - For example, tetraoxide would become _____.

EXAMPLE: Write the formula for each of the following compounds.

a. Disulfur monochloride **b.** Tetraphosphorus pentaselenide **c.** Dibromine heptoxide

PRACTICE: Give the systematic name for the following compound: SeF_6

PRACTICE: Give the systematic name for the following compound: IO_5

PRACTICE: Give the systematic name for the following compound: N_2S_4