

## "Chemistry! It's all about the Stoichiometry, baby!"

1. The active ingredient in photographic fixer solution contains Na, S and O. Analysis of a sample shows that the sample contains 0.979g Na, 1.365g S, and 1.021g O. Calculate an empirical formula.

2. Put the following in order of increasing # of total atoms.

- a) 100g of Pb
- b) 2.0 mol of Ar
- c)  $2.0 \times 10^7$  O<sub>2</sub> molecules
- d)  $5.86 \times 10^{18}$  amu of Be
- e) 0.25 mol (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>

3. Name or write the formula for the following:

H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>: \_\_\_\_\_

Fe(NO<sub>2</sub>)<sub>2</sub>: \_\_\_\_\_

Ni<sub>2</sub>O<sub>3</sub>: \_\_\_\_\_

Cl<sub>2</sub>F: \_\_\_\_\_

acetic Acid: \_\_\_\_\_

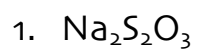
aluminum hydrogen sulfite: \_\_\_\_\_

calcium bromate: \_\_\_\_\_

hydrocyanic acid: \_\_\_\_\_

The End!

Answers:



2. lowest  $\rightarrow$  C, D, A, B, E  $\rightarrow$  highest

3. dichromic acid

iron(II)nitrite

nickel(III)oxide

dichlorine monofluoride

$\text{CH}_3\text{COOH}$  or  $\text{HCH}_2\text{COO}$  or  $\text{H}_4\text{C}_2\text{O}_2$  or  $\text{H}_3\text{C}_2\text{O}_2\text{H}$