

1. (5 points) Give the name or formula for the following:

- (a) Na_3PO_4 Sodium phosphate (b) sulfuric acid $\text{H}_2\text{SO}_4(\text{aq})$
 (c) $\text{KC}_2\text{H}_3\text{O}_2$ potassium acetate (d) copper (I) oxide Cu_2O
 (e) $\text{HNO}_3(\text{aq})$ Nitric Acid

Warn them if they forget this

2. (3 points) Classify the following as a Metal, Non-metal or Metalloid.

- (a) sulfur Non-metal (b) silicon Metalloid
 (c) lead Metal

3. (3 points) Calculate the number of grams of oxygen in 1.002 g of sodium phosphate. (

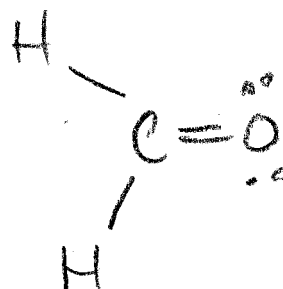
$$1.002 \text{ g Na}_3\text{PO}_4 \times \frac{1 \text{ mol}}{163.94 \text{ g}} \times \frac{4 \text{ mol O}}{1 \text{ mol Na}_3\text{PO}_4} \times \frac{16.00 \text{ g}}{1 \text{ mol O}} = 0.3912 \text{ g O}$$

- 4 sf -

4. (4 points) Draw the Lewis dot structure for the following molecules. (include all lone pairs)



4 + 6 = 10 Avail
 8 + 8 = 16 NEEDED
 6 shared



2(1) + 4 + 6 = 12 A
 2(2) + 2(8) = 20 N
 8 shared