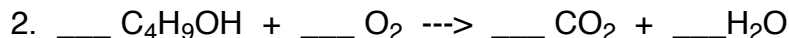
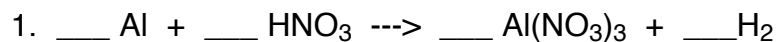


### + WS 4.8 - Review

Balance these following chemical reactions:



Use dimensional analysis to determine the following:

3. How many molecules are in 0.1029 moles of He?

Ans \_\_\_\_\_

4. 8.4 x 10<sup>24</sup> boron atoms weigh how many grams?

Ans \_\_\_\_\_



How many grams of O<sub>2</sub> will be produced from 55.4 g of KClO<sub>3</sub>?

Ans \_\_\_\_\_



a. Starting with 30.1 g of Na and 22.4 g of Cl<sub>2</sub>, how many grams of NaCl can be made?

Ans \_\_\_\_\_

b. How many g of excess reactant remain?

Ans \_\_\_\_\_

c. Afterwards, 17.1 grams of NaCl are produced by the reaction. What is the % yield?

Ans \_\_\_\_\_

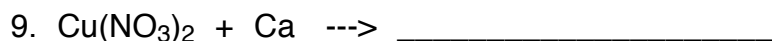
7. A molecule is 87.5% N and is 12.5% H. What is its empirical formula?

Ans \_\_\_\_\_

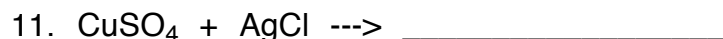
If this molecule's formula weight is 48 g/mol, determine its actual formula: \_\_\_\_\_

Use the activity series (at right) to predict whether the following reactions will occur...

If **YES**, then write the products -- If **NO**, then write 'N. R.' (no reaction)



**Predict the products:**



ans. bank for #3,4,5,6 (IRO+2): 21.7, 46.3, 6.19E22, 7.96E22, 0.0250, 15.6, 150, 36.9

Li
K
Ca
Na
Mg
Al
Mn
Zn
Cr
Fe
Cd
Co
Ni
Sn
Pb
H
Cu
Hg
Ag
Pt
Au