

CHEM 121 – Worksheet 29 – Fall 2015

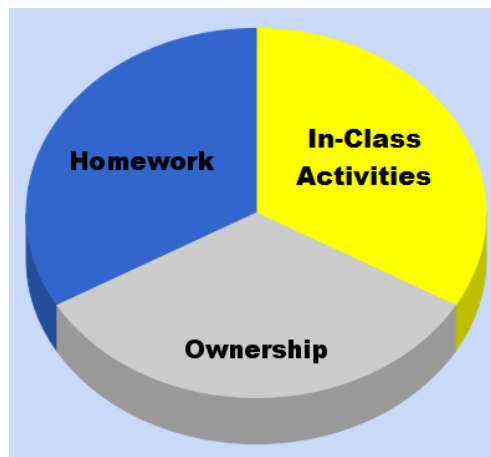
Your Name: _____

Directions: Please place your name ONLY on this worksheet. Complete this worksheet prior to class and be prepared to go to the board and show your work.

Balance the following reactions (in Questions 1-6) using the non-traditional method of balancing redox reactions that use hydroxide ion.

1. Nickel(II) hydroxide + oxygen = Nickel(III) hydroxide

2. Copper(I) hydroxide + oxygen = Copper(II) hydroxide



3. Cobalt(II) hydroxide + oxygen = Cobalt(III) hydroxide

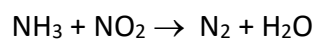
4. Iron(II) hydroxide + Oxygen = Iron(III) hydroxide

5. Mercury(I) hydroxide + Oxygen = Mercury(II) hydroxide

NOTE: Don't forget that Mercury(I) is a little weird when you write out the formula for Mercury(I) hydroxide!

6. Tin(II) hydroxide + Oxygen = Tin(IV) hydroxide

7) Using the “out of the box” method, balance the following reaction. Show all of your work.



Balance the following chemical reactions (in Questions 8-12) by one of the three methods discussed in the lecture on redox reactions:

