

LAD G3 (pg 1 of 3) Single Replacement Reactions - always Redox

Name _____

1. Zinc nitrate is put into water and then combined with copper. [if a Rx occurs, assume copper(II)]
 - a. Observations:

The element that is more reactive is the one that will exist as an ion, rather than as an element.

- b. Which element must be more reactive: copper or zinc?

- c. Check the activity series and confirm your conclusion. Which element is above – copper or zinc?

- d. Equations (overall and net ionic):

2. Copper nitrate is put into water and is then combined with solid zinc.
 - a. Observations: (color of solid product? changing color of the solution?)

Copper in ion form is blue (or blue-green), yet in its elemental form it is its distinctive “copper” color.

- b. What color is the solid product that forms? What element is the solid product?

- c. What is causing the starting solution to be blue?

- d. Why does the blue color of the solution fade as the reaction proceeds? Where does the blue color go?

- e. Equations (overall and net ionic):

