CHEM 1311- Aqueous Reactions

Identify the reaction (1), write the balanced molecular equation by predicting the products (2), write the complete ionic equation (3), and list the spectator ions (4).

Silver nitrate and calcium chloride

1)

2)

3)

4)

Phosphorus and chromate

1)

2)

3)

4)

Acetic acid and potassium hydroxide

1)

2)

3)

4)

In the following reactions, identify the oxidized/reduced elements.

Zn + CuSO4 🡪 ZnSO4 + Cu

Oxidized:

Reduced:

Fe3O4 + 4H2 🡪 3Fe + 4H2O

Oxidized:

Reduced:

4Al + 3O2 🡪 2Al2O3

Oxidized:

Reduced:

What is the molarity of a solution with 10.7 grams of NaCl dissolved in 0.25 liters of water?

Determine the molarity of a solution with 2.30 moles of KNO3 dissolved in 2310 ml of water?

How many moles of solute exist if a 0.40M aqueous solution has a volume of 1.20 liters?

A mixture contains 2.5mL 3.0M HCl and 5.0mL of NaOH. What molarity of sodium hydroxide is required to neutralize the pH of the solution?