

Reactions and Stoich Review

1. Writing Reactions: -Write formulas of compounds correctly
-Balance
-Identify the type of reaction
-Know symbols ex. (s), (l), (g), etc.
2. A 10.0 g piece of zinc is placed into a solution containing copper (II) nitrate.
 - a) How could we predict, before going to the lab, if a reaction will occur?
 - b) What would be evidence in the lab that would confirm that a reaction did occur?
 - c) How much copper would theoretically be produced?
3. A solution containing 40.0 g barium nitrate is mixed with a solution of sodium sulfate.
 - a) How could we predict, before going to the lab, if a reaction will occur?
 - b) What would be evidence in the lab that would confirm that a reaction did occur?
 - c) How much barium sulfate would theoretically be produced?
 - d) Would 30.0 g sodium sulfate be enough to completely react with the barium sulfate, and if so, how many g of sodium sulfate would be left over?
4.
 - a) Suggest conditions that could be altered to cause reactions to happen faster:
 - b) Describe the theory that explains why these reactions would happen faster:
5. Propane is burned in air.
 - a) Write a balanced reaction:
 - b) If $\Delta H = 2874$ kJ for this reaction, how many grams of propane would be required to produce 10,000 kJ?
 - c) How many L CO_2 would be given off?
6. 10.0 g of potassium chromate reacts with 20.0 g of lead (II) nitrate.
 - a) Which reactant is the limiter?
 - b) How many g of each product is produced?
 - c) How much excess reactant is left over?