

Recycling Copper

Data Table

Part	Evidence of Chemical Reaction and Properties of Product(s)
A	
B	
C	
D	
Mass of Copper Metal (initial)	
Mass of Evaporating Dish	
Mass of Evaporating Dish + Copper	

Post-Lab Questions *(Use a separate sheet of paper to answer the following questions.)*

- Write a balanced chemical equation for each reaction in Parts A–D. Classify each reaction as a single replacement, double replacement, and/or oxidation–reduction reaction.
- Determine the mass of copper recovered at the end of the “four-reaction copper cycle” and calculate the percent recovery.

$$\text{Percent recovery} = \frac{\text{Mass of copper (final)}}{\text{Mass of copper (initial)}} \times 100\%$$

- List at least three sources of experimental error that might lead to a mass of recovered copper less than that originally used. Be specific!
- List at least three sources of experimental error that might lead to a mass of recovered copper greater than that originally used. Be specific.