

The chemistry of copper: ap chemistry lab report flashcard



**ASSIGN
BUSTER**

The lab was to include a purpose, procedure, data/observations, all reactions and side reactions written out with qualitative data beneath each product and reactant except H₂O, and a summary. The purpose of this experiment is to observe the qualitative aspects of a series of reactions involving copper.

Procedure 1 . Measure about leg of solid copper. 2. Place Cue In Erlenmeyer flask and place flask under fume hood. 3. Add drowses MM HON.

until solid copper is completely reacted. 4. Place flask in water bath. 5. Add MM Noah slowly until no more solid forms.

6.

MI contents by slowly swirling flask. 7. Place flask back in water bath, heat to boiling, and stir. 8.

Heat until separation of solid and solution. 9. Cool flask and allow contents to settle. 10.

Decant liquid from solid. 1 1 . Wash solid with water and decant again. 1 2. Add MM HCl until solid disappears, then add 1-2 ml excess. 1 3.

Add leg of aluminum to flask. Data/Observations 1 . Start with leg of orange/bronze solid. FIFO 3. Clear, blue liquid forms when Cue is fully reacted.

4. Solid blue precipitate forms when Noah is added. 5. When heated, solution turns black. 6.

When settled, a dark crystalline solid can be seen on the bottom, and a clear, colorless solution is on top.

7. When HCl is added, a bluish/green solution forms. 8. When solid Al is added, bubbles form and the intensity of the solution's color diminishes. 9. When reaction is complete, orange/bronze solid and clear, colorless solution is visible.

Reactions cue + NINNY Orange/Bronze Solid Clear, Colorless Liquid
CUE(NON) 2 + NONE + AH Clear, Blue Liquid Red/Brown Gas 2. + Noah
Clear, Colorless Liquid + nanny Blue, Solid Precipitate Clear, Colorless Liquid
3. Excess HON. + Noah = Nanny + H₂O .

Black, Crystalline Solid Clear, Colorless Liquid cue + AH Blue/Green Solution
5. Caucus + al = Silver Solid ICC + local Orange/Bronze Solid Clear, Colorless
Liquid 6. Excess CLC + al = AH + lace Colorless Gas Summary This
experiment allows us to observe copper as it goes through a series of
reaction. We begin with copper as a pure solid with an orange/bronze color.
Then, it becomes part of a clear, blue solution when HON. is added.

Next, we see it as a solid, blue precipitate with the addition of Noah. Then, it
becomes a black crystalline solid when dated.

Next, a blue/green solution is formed when HCl is added. And finally, when
solid aluminum is added it reverts back to pure solid copper. If we had
enough time for complete reactions to occur, the mass of copper at the end
should have been the same as the mass of copper we started with.

Sorry if its a little confusing, copy and paste didn't work out so well. I tried to fix it the best I could. Corrections For some reason I can't change this. In reaction 2, clear, colorless liquid should be under Noah In reaction 5, silver solid should be under al