

Name:

Period:

Date:

Copper Cycle Lab Observations

		Reactants			Products			
Day 1	2	Cu (s) copper metal	+	HNO ₃ (aq) nitric acid	→	N ₂ O ₄ (g) dinitrogen tetroxide gas	+	Cu ⁺⁺ (aq) aqueous copper(II) ions
	4	Cu ⁺⁺ (aq) aqueous copper(II) ions	+	NaOH (aq) aqueous sodium hydroxide	→	Cu(OH) ₂ (s) solid copper(II) hydroxide		
	5	Cu(OH) ₂ (s) solid copper(II) hydroxide			→	CuO (s) solid copper(II) oxide	+	H ₂ O (g) water vapor
	8	CuO (s) solid copper(II) oxide	+	HCl (aq) hydrochloric acid	→	Cu ⁺⁺ (aq) aqueous copper(II) ions	+	H ₂ O (l) water
Day 2	1	Cu ⁺⁺ (aq) aqueous copper(II) ions	+	Al (s) aluminum metal	→	Cu (s) copper metal	+	Al ³⁺ (aq) aqueous aluminum(III) ions
	2	Cu ⁺⁺ (aq) aqueous copper(II) ions	+	NH ₃ (aq) aqueous ammonia	→	Cu(NH ₃) ₄ ⁺⁺ copper(II) tetra ammine		