

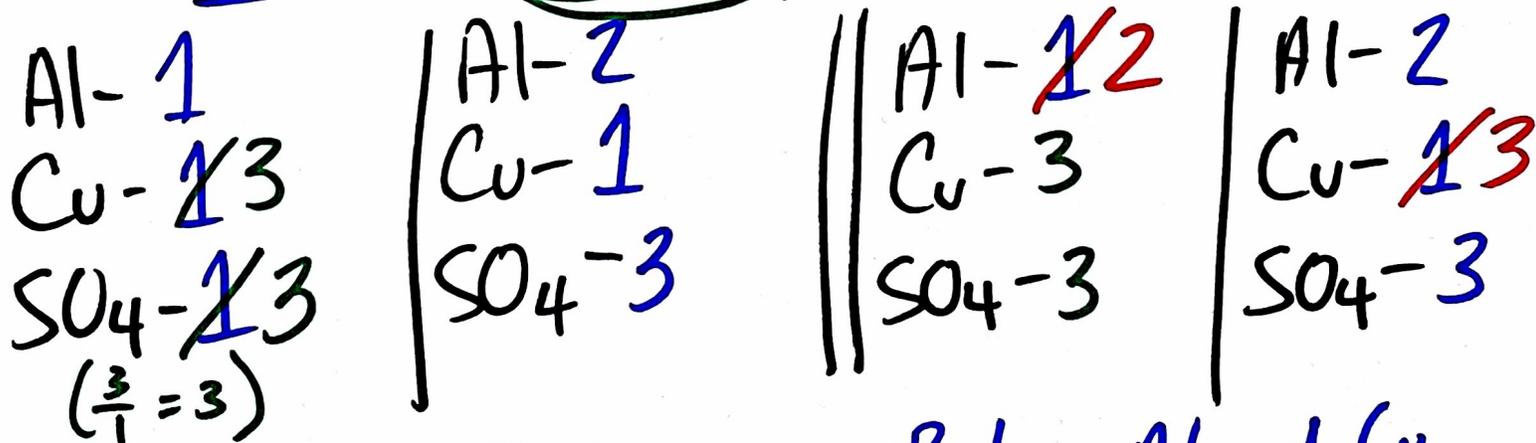
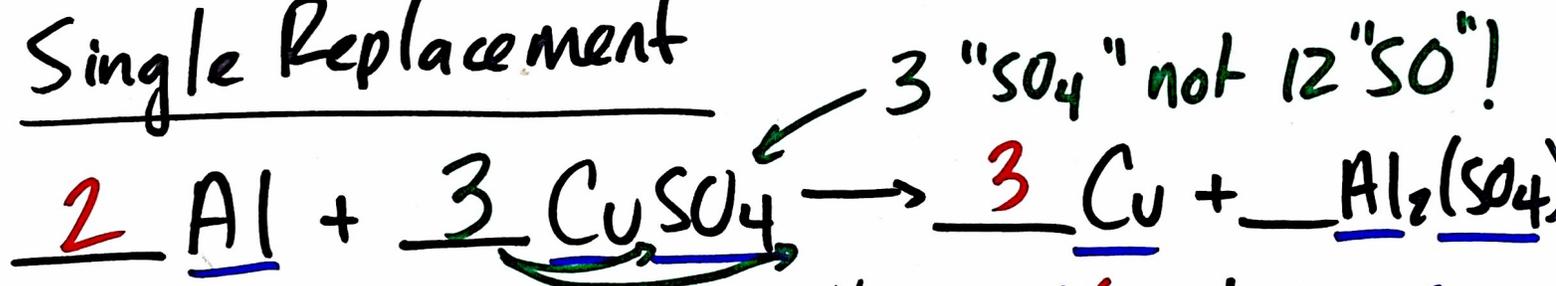
Noteset 5C - In Class Notes

Balancing w/ Polyatomic Ions

Polyatomic ions = 1 atom in balancing



Single Replacement



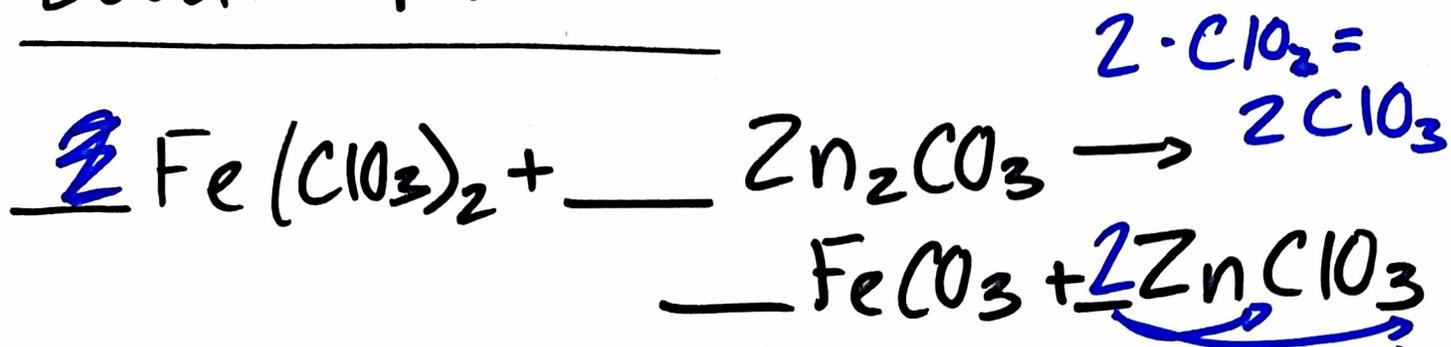
Balance SO₄²⁻ First

Balance Al and Cu

Polyatomic ions are balanced "whole"



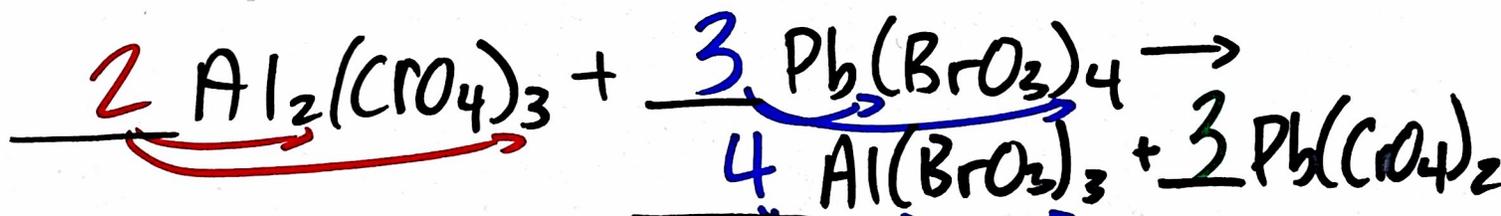
Double Replacement



Fe - 1	Fe - 1	Fe - 1	Fe - 1
ClO ₃ - 2	ClO ₃ - 1 2	ClO ₃ - 2	ClO ₃ - 2
Zn - 2	Zn - 1 2	Zn - 2	Zn - 2
CO ₃ - 1	CO ₃ - 1	CO ₃ - 1	CO ₃ - 1

Balance ClO₃ first

Eqn. Balanced



Al: 2	Al: 1 4	Al: 2 4 ($\frac{4}{2} = 2$)	Al: 4
CrO ₄ : 3	CrO ₄ : 2	CrO ₄ : 3 6	CrO ₄ : 6
Pb: 1 3	Pb: 1	Pb: 3	Pb: 3
BrO ₄ : 4 12	BrO ₄ : 3 12	BrO ₄ : 12	BrO ₄ : 12

Balance BrO₄

(BrO₄: $\frac{12}{4} = 3$) (BrO₄: $\frac{12}{3} = 4$)

Balance Al, Balance CrO₄

($\frac{4}{2} = 2$) ($\frac{6}{3} = 2$)