Balancing Chemical Equations

The Basics

Place/change the necessary coefficients in front of entire molecules (DO NOT Change subscripts!!!)

Make sure both sides of the equation have the same number of atoms of each type.

Make sure coefficients are in the lowest whole number ratios.

Polyatomic ions <u>usually</u> stay intact.

STATES of Matter: aqueous (aq), liquid (l), solid (s), gas (g)

Balancing Chemical Equations

The Process

MINOH:

1) metals, 2) ions (polyatomics), 3) non-metals, 4) oxygen, 5) hydrogen

WITH COMBUSTION, IT IS EASIER TO LEAVE OXYGEN UNTIL THE END

Remember: Coefficient vs Subscript 4 Al₂(SO₄)₃ Al = $\underline{8}$, S = $\underline{12}$, O = $\underline{48}$

Turn to and complete "Balancing Equations 1 and 2" in your notes.