**Tips for Balancing Equations by Inspection:**

* 1. **Check for Diatomic Molecules – H2 N2 O2 F2 Cl2 Br2 I2**

If these elements appear **by themselves** in an equation, they **must** be written with the subscript 2.

* 1. **Balance Metals**

# TIP

Balance equations by changing **coefficients**,

never by changing

**subscripts**.

* 1. **Balance Non-metals**
  2. **Balance Oxygens**
  3. **Balance Hydrogens**
  4. **Recount All Atoms**

If all the atoms are not balanced at this point, there is a problem somewhere. Work your way back up the steps, **from bottom to top**, until you find the problem, and correct it.

**7. If every coefficient will reduce, rewrite in the simplest whole number ratio.**