Balancing Act

Name _____

Atoms are not _____ or _____ during a chemical reaction. Scientists know that there must be the _____ number of atoms on each _____ of the _____. To balance the chemical equation, you must add _____ in front of the chemical formulas in the equation. You cannot _____ or _____ subscripts!

1) Determine number of atoms for each element.

2) Pick an element that is not equal on both sides of the equation.

3) Add a coefficient in front of the formula with that element and adjust your counts.

4) Continue adding coefficients to get the same number of atoms of each element on each side.

☐ Mg + ☐ O_2 ➔ ☐ MgO

Mg = Mg =

O = O =

Try these:

☐ Ca + ☐ O_2 ➔ ☐ CaO

Ca = Ca =

O = O =

☐ N_2 + ☐ H_2 ➔ ☐ NH_3

N = N =

H = H =

☐ Cu_2O + ☐ C ➔ ☐ Cu + ☐ CO_2

Cu = Cu =

O = O =

C = C =

☐ H_2O_2 ➔ ☐ H_2O + ☐ O_2

H = H =

O = O =