**Vocabulary: Limiting Reactants**

dictionary2

**Vocabulary**

* Chemical equation – a symbolic representation of a *chemical reaction*.
  + In a chemical equation, *reactants* are shown on the left, and *products* are shown on the right.
  + For example, the chemical equation Na + Cl2 🡪 NaCl describes the reaction of sodium (Na) and chlorine gas (Cl2) to form table salt.
  + In a balancedchemical equation, there are the same numbers of each type of atom on each side of the equation: 2Na + Cl2 🡪 2NaCl is balanced because there are two sodium atoms and two chlorine atoms on each side of the equation.
* Chemical formula – a symbolic representation of an element or compound.
  + Chemical formulas use *subscripts* and parentheses to denote the number of atoms in a *molecule* of the substance.
  + Examples of chemical formulas include NaCl (table salt), H2O (water), and Ca(OH)2 (calcium hydroxide).
* Chemical reaction – a process in which one or more substances are transformed into others.
  + In a chemical reaction, bonds between atoms are broken and new bonds are formed, joining atoms into different combinations.
  + No atoms are created or destroyed in a chemical reaction.
* Coefficient – a number that multiplies a term in an equation.
  + In a chemical equation, the coefficients indicate the number of each type of molecule. For example, 6H2O means that there are six water molecules.
* Limiting reactant – the reactant in a chemical reaction that limits the amount of product that is able to form.
* Molecule – a stable particle made of two or more atoms.
  + A water molecule (H2O) is made of two hydrogen atoms and one oxygen atom.
* Product – a substance that is formed in a chemical reaction.
* Reactant – a substance that takes part in a chemical reaction.
* Subscript – a number in a chemical formula representing the number of atoms of a particular element in one molecule of the compound.
  + For example, the subscript “2” in H2O indicates that there are two hydrogen atoms in a water molecule.