Reaction Rate

**Reaction rate: is the amount of time that a chemical reaction takes place based on the limiting reactant.**

**Reaction rate can be measured by timing how long it takes the limiting reactant to change into one or several of the products.**

**There are two factors (concentration, temperature) that effect how fast a reaction takes place.**

**Temperature is directly proportional (as it increases so does the reaction rate) to the reaction rate.**

**As the molecules gain heat energy, they move more rapidly which causes them to collide more often and the reaction happens faster.**

**Concentration is also directly proportional to the reaction rate.**

**As the number of molecules per liter (or molarity) they also collide more often (“traffic jam”), more collisions = faster reaction.**

**Example:**

**1 M acid 2 M acid**

**1 M acid has less molecules per liter and reacts slower.**