**Factors Affecting the Rates of Reaction**







**Concentration**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ concentration \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the reaction rate (speed)
* More particles increase chance of effective collisions

**Catalyst**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the rate of reaction by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the activation energy
* Is \_\_\_\_\_\_\_\_\_ consumed in the reaction

**Surface Area**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ surface area \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the reaction rate (speed)
* Due to more exposed particles that can react (more effective collisions)

**Pressure**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pressure \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the reaction rate (speed)
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Due to an increase in concentration

**Temperature**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ temperature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the reaction rate (speed)
* Increases the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ effective collisions
* Reactants have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ when colliding

**Background Info:**

* There are SIX Factors that affect the rate of reaction by changing the number if effective collisions that take place between particles
* The more effective collisions, the faster the reaction

**Type of Reactant**

* - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ substances react \_\_\_\_\_\_\_\_\_\_\_\_\_\_. They easily break into \_\_\_\_\_\_\_\_ when you dissolve them
* - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ substances react \_\_\_\_\_\_\_\_\_\_\_\_\_\_ - Requires more energy/time to break bonds