**Concentration**

**Temperature**

**Catalysts**

**Surface Area**

**Nature of Reactants**

The type of bonding can affect the speed of a reaction as some bonding types require more energy to break them than others.

* If a reaction involves breaking of covalent bonds the reaction will often be \_\_\_\_\_\_\_\_
* The reaction of ions in solution (e.g. precipitation reactions) will be \_\_\_\_\_\_\_\_.

**Collision Theory**

For a reaction to take place the particles in the reaction must:

1. collide with \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ to break bonds and form new ones.

1. collide with correct \_\_\_\_\_\_\_\_\_\_\_\_\_ to allow particles to rearrange themselves into new compounds.

*Rates of*

*Reaction*