Chemical Reactions

Chemical reactions occur when atoms \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Reactants are on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_side of the arrow and products on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ side.

(s) = (l) = (g) =

(aq) = Δ =

Na + Cl2 🡪 NaCl

NO + H2 🡪 NH3 + H2O

The diatomic elements are:

|  |  |  |
| --- | --- | --- |
| Type of reaction | Pattern | Example(s) |
| Combustion | CxHy + O2 🡪 CO2 + H2O |  |
| Combination |  |  |
|  | AB 🡪 A + B |  |
| Single Displacement |  |  |
|  |  |  |

Write a balanced reaction for solid phosphorus (P4) reacting with gaseous chlorine (Cl2) to make liquid phosphorous pentachloride. What class of reaction is this?

Write a balanced reaction for aqueous iron (II) chloride reacting with aqueous potassium hydroxide to make solid iron (II) hydroxide and aqueous potassium chloride. What class of reaction is this?