**Explaining and drawing chemical reactions:**

Use the Key to finish balancing the chemical reactions below.

**C O S Cu**

**H Mg Cl N**

1. **DESCRIPTION:** Burning Carbon in air (Oxygen gas) to form Carbon Dioxide

**EQUATION: C + H2 → CH4**

**DIAGRAM:**

1. **DESCRIPTION:** Heating Copper Carbonate to form Copper Oxide & Carbon Dioxide

**EQUATION: CuCO3 → CuO + CO2**

**DIAGRAM:**

1. **DESCRIPTION:** Combing Hydrogen with Sulphur to form Dihydrogen Sulphide

**EQUATION: H2 + O2 → H2O**

**DIAGRAM:**

**The following questions all involve balancing (adding coefficients) equations**

1. Draw the atoms/molecules to balance the equation
2. Add the correct coefficient in front of the atom/molecule (if you have drawn two then add a coefficient of two into the equation)
3. **DESCRIPTION:** Burning Magnesium in air (Oxygen gas) to form Water

**EQUATION: Mg + O2 → MgO**

**DIAGRAM:**

1. **DESCRIPTION:** Heating Hydrogen and Nitrogen to form Ammonia

**EQUATION: H2 + N2 → NH3**

**DIAGRAM:**

1. **DESCRIPTION:** Dissolving Magnesium in Hydrochloric Acid to form Magnesium Chloride and Hydrogen gas

**EQUATION: Mg + HCl → MgCl2 + H2**

**DIAGRAM:**

1. **DESCRIPTION:** Burning ethane gas in oxygen to produce carbon dioxide and Hydrogen

**EQUATION: C2H6 + O2 → CO2 + H2**

**DIAGRAM:**