What is a **physical change**?

What is a **chemical change**?

Fill in the blanks:

In any reaction the total \_\_\_\_\_ of products is the \_\_\_\_ as the total mass of the \_\_\_\_\_\_\_\_\_\_\_\_ .

***mass reactants same***

What is this called?

Describe three signs that suggest a **chemical reaction** has taken place:

*
*

Fill in the table below:

|  |  |  |
| --- | --- | --- |
|  | Number of different elements | Number of atoms |
| H2 |  |  |
| C02 |  |  |
| H2SO4 |  |  |
| K2CO3 |  |  |

Name the **compound** these **substances** would make:

Magnesium Oxygen \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lithium Chloride \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sodium Carbon Oxygen \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is a **fuel?**

What is **combustion?**

Write the **word equation** for **combustion:**

What **chemical reaction** takes place when you **burn magnesium?**

1. *Hydrogen \_\_\_*
2. *Helium \_\_\_*
3. *Lithium \_\_\_*
4. *Carbon \_\_\_*
5. *Nitrogen \_\_\_*
6. *Oxygen \_\_\_*
7. *Fluorine \_\_\_*
8. *Neon \_\_\_*
9. *Magnesium \_\_\_*

*10)Aluminium \_\_\_*

Write the **symbol** for the following common **elements:**

Draw **particle** diagrams for an **element**, a **compound** and a **mixture:**

|  |  |  |
| --- | --- | --- |
| **Element** | **Compound** | **mixture** |
|  |  |  |

What is an **element**?

What is a **compound**?

Label Dalton’s **atomic model** with:

**Proton**

**Electron**

**Neutron**

**Atoms, Elements and Compounds**