**14.1 Guided Reading**

**Integrated Science – Matter Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Per:\_\_\_**

1. Decide whether each change is a physical change or a chemical change. Write P or C next to each example in the table.

|  |  |
| --- | --- |
| Baking Bread |  |
| Breaking a glass |  |
| Burning wood |  |
| Mowing the yard |  |
| Peeling an orange |  |

1. Physical and chemical changes involve \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. A chemical reaction is the process of breaking molecular bonds and reforming them into a new \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. List four ways that would lead you to believe a chemical reaction had occurred.
4. What are reactants and products in a chemical reaction?
5. Complete the following table:

|  |  |
| --- | --- |
| **Symbol** | **Meaning** |
| (s) |  |
|  | Substance is a liquid |
| (g) |  |
|  | Substance is dissolvedIn a solution |

1. The statement, “the total mass of the products must equal the total mass of the reactants” is known as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. In a chemical equation, what does an arrow mean?