1. Physical Properties can be observed without changing the substance’s identify.

Chemical Properties are a substance’s ability to react to something.

Identify the following as either Physical (P) or Chemical ( C) property.

\_\_\_\_\_\_1. blue color \_\_\_\_\_\_8. melting point

\_\_\_\_\_\_2. density \_\_\_\_\_\_ 9. reacts with water

\_\_\_\_\_\_3. Flammability (burns) \_\_\_\_\_\_10. hardness

\_\_\_\_\_\_4. solubility (dissolves) \_\_\_\_\_\_11. boiling point

\_\_\_\_\_\_5. reacts with acid \_\_\_\_\_\_12. luster

\_\_\_\_\_\_6. supports combustion \_\_\_\_\_\_13. odor

\_\_\_\_\_\_7. sour taste \_\_\_\_\_\_14. reacts with air

1. Physical Change involve a change in size, shape or phase, includes dissolving. A chemical change means a chemical reaction occurred and a NEW substance is produced, with NEW properties.

\_\_\_\_\_1. Table Salt dissolves in water. \_\_\_\_\_\_7. Milk sours.

\_\_\_\_\_2. Bicycle chain rusting. \_\_\_\_\_\_8. Ice melts.

\_\_\_\_\_3. Paper torn in half \_\_\_\_\_\_9. Wood is chopped

\_\_\_\_\_4. Pancakes cook. \_\_\_\_\_\_ 10. Food is digested.

\_\_\_\_\_5. Baking soda reacts to vinegar. \_\_\_\_\_\_11. Paper towel absorbs water.

\_\_\_\_\_6. A tire is inflated.

1. What are the 5 main pieces of evidence you may SEE that tells you a chemical reaction took place?

Change in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Change in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Change in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Production of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Production of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. A solution is composed of two main components: A \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the substance that is being dissolved, and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, what the substance is dissolving into.
2. What is the definition of a *super*saturated solution?
3. Crystals form in nature in two ways: When water from a solution of dissolved minerals \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and when magma (molten rock) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and hardens.
4. Crystals form when the atoms of a cooling substance arrange themselves in an organized pattern. The more time a solution has to cool, the crystals will be bigger or smaller?
5. State the Law of Conservation of Mass:
6. Identify the type of the reactions below as either Synthesis, Decomposition, Single Displacement, Double Displacement, Combustion:







1. What is the definition of a polymer?
2. Name THREE natural polymers and THREE synthetic polymers.

|  |  |
| --- | --- |
| Natural | Synthetic |
|  |  |

1. Name THREE characteristics of acids.
2. Name THREE characteristics of bases.

Identify the following as either acid (A) or base (B)

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_ NaOH
2. \_\_\_\_\_\_ HCl
3. \_\_\_\_\_\_ proton acceptor
 | 1. Acid
2. Base
 |