**Structure of Matter Learning Targets**

**(Book pages: 64-72 and 84-93, 97)**

**\*These Learning Targets will replace the traditional “study guide” or “review sheet” that you may be accustomed to getting as you study for a test. You should use these to guide your learning and to prepare for upcoming assessments.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Target** | **Before we start** | **Still don’t know** | **Know some of it** | **Can Teach it** |
| 1. I can list the 4 states of matter |  |  |  |  |
| 1. I can explain the three general properties of solids (shape, volume, particle movement) |  |  |  |  |
| 1. I can explain the three general properties of liquids (shape, volume, particle movement) |  |  |  |  |
| 1. I can explain the three general properties of gases (shape, volume, particle movement) |  |  |  |  |
| 1. I can explain the difference between gases and plasmas. |  |  |  |  |
| 1. When given a diagram of the different states of matter, I can identify them all, and label the points at which each matter changes states (freezing, melting, condensation, vaporization) |  |  |  |  |
| 1. I can differentiate between physical and chemical properties and can label them correctly when given examples. |  |  |  |  |
| 1. I can differentiate between physical and chemical changes and can label them correctly when given examples. |  |  |  |  |
| 1. I know the four identifiers or evidence that a chemical change has occurred and can give examples of each. |  |  |  |  |
| 1. I can accurately create a graph and plot data on a graph. |  |  |  |  |

**Key Terms:**

|  |  |  |  |
| --- | --- | --- | --- |
| Vaporization point | Condensation point | Melting point | Freezing point |
| Mixture | Solution |  | Precipitate |
| Chemical change | Physical change | Physical property | Chemical property |
| Substance | Thermal Energy | Matter | Viscosity |

**Target 1: List the four states of matter \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Targets 2 – 4:**

Shape Volume Particles

Shape Volume Particles

Shape Volume Particles

**Target 5**:

Gas

Plasma

**\_\_\_\_\_\_\_\_\_\_\_\_**

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**\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_**

**point**

**\_\_\_\_\_\_\_\_\_\_\_\_**

**point**

**\_\_\_\_\_\_\_\_\_\_\_\_**

**point**

**\_\_\_\_\_\_\_\_\_\_\_\_**

**point**

**Increasing energy**

**Decreasing energy**

**Target 6**:

Targets 7 – 8:

Properties:  
  
\_\_\_\_\_ Vinegar reacts with baking soda to make carbon dioxide.  
  
HH00143_\_\_\_\_\_ Diamonds are the hardest substance on the Moh’s Hardness Scale.

\_\_\_\_\_ The boiling point of water is 100°C.

**Changes:**

\_\_\_\_\_Ice on a lake melts.  
  
\_\_\_\_\_Charcoal in a fire turns to ash after several hours.

|  |  |  |
| --- | --- | --- |
| **Identifier / Evidence** | **Example** | **Non-example** |
| **1.** |  |  |
| **2.** |  |  |
| **3.** |  |  |
| **4.** |  |  |

\_\_\_\_\_A pencil is sharpened in a pencil sharpener, leaving behind shavings.

**Target 9:**