Chemistry Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit 1 Period \_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# **Mass and Change Lab**

## Pre-Lab Questions

Chemistry is the science of change. Scientists (and now you!) need tools to describe matter and the change of matter in a quantitative way. Mass is one useful property of matter that we can measure to determine how much “stuff” we have. This is a 7-part lab that gives you the opportunity to examine a number of instances in which the *appearance* of the system changes and to see if the mass changes as well.

1. What happens when you break a solid into smaller pieces? Predict: will the mass change if a marshmallow is smashed?
2. What happens when you leave a soft drink in the freezer? Predict: does the mass decrease as the temperature decreases?
3. When some solutions are combined, a solid forms. Predict: will the mass change when the solid is formed?
4. What happens when something burns? Predict: what will happen to the mass of the steel wool when it is heated?
5. What happens when something dissolves? Predict: what will happen to the mass when sugar dissolves in water?

Chemistry Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit 1 Period \_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# **Mass and Change Lab**

## Data Table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Change of Mass** |  |  |  |  |  |  |  |
| **Final Mass** |  |  |  |  |  |  |  |
| **Initial Mass** |  |  |  |  |  |  |  |
| **Observations** **After** |  |  |  |  |  |  |  |
| **Observations** **Before** |  |  |  |  |  |  |  |
| **Description** |  |  |  |  |  |  |  |
| **Part** | **1** | **2** | **3** | **4** | **5** | **6** | **7** |

Chemistry Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit 1 Period \_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# **Mass and Change Lab**

## Particle Pictures

##  Make Particle Pictures *\*Corrections\*on bottom half*

|  |
| --- |
| **Part 1 – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| *Before* | *After* |
|  |  |
|  |  |
| **Part 2 – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| *Before* | *After* |
|  |  |
|  |  |
| **Part 3 – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| *Before* | *After* |
|  |  |
| **Part 4 – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| *Before* | *After* |
|  |  |
|  |  |
| **Part 5 – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| *Before* | *After* |
|  |  |
|  |  |
| **Part 6 – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| *Before* | *After* |
|  |  |
|  |  |
| **Part 7 – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| *Before* | *After* |
|  |  |