**Chemistry Lab Worksheet**

**Observing Matter**

Matter is defined as anything that has mass and takes up space. Matter exists in the physical phases of solid, liquid, gas, and plasma.

Today you are going to observe some properties of different types of matter, and suggest the possible identities of these substances.

You will be passed around samples of matter. You will have a certain amount of time to observe and record data about each sample. Please be sure that you record the information at each station in the correct place on your lab report.

You cannot taste or touch the samples. Make predictions as to what each substance might be.

Complete all required tasks on your lab report, completely fill out the Data Table, and answer all questions.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Location** | **Phase**  **(solid, liquid, gas)** | **Color** | **Odor** | **Texture**  **(for example: grains, powder, solid piece, etc.)** | **Category**  **(element, compound, smooth mixture, coarse mixture)** | **Identity or Possible Identity** |
| **Item 1** |  |  |  |  |  |  |
| **Item 2** |  |  |  |  |  |  |
| **Item 3** |  |  |  |  |  |  |
| **Item 4** |  |  |  |  |  |  |
| **Item 5** |  |  |  |  |  |  |
| **Item 6** |  |  |  |  |  |  |
| **Item 7** |  |  |  |  |  |  |
| **Item 8** |  |  |  |  |  |  |
| **Item 9** |  |  |  |  |  |  |
| **Item 10** |  |  |  |  |  |  |
| **Item 11** |  |  |  |  |  |  |
| **Item 12** |  |  |  |  |  |  |
| **Item 13** |  |  |  |  |  |  |
| **Item 14** |  |  |  |  |  |  |
| **Item 15** |  |  |  |  |  |  |
| **Item 16** |  |  |  |  |  |  |
| **Item 17** |  |  |  |  |  |  |

**Please circle the correct answers to the following questions concerning matter.**

1. **Which of the following is not classified as matter?**
   1. a piece of concrete
   2. oxygen gas
   3. ocean water
   4. fire
2. **Which two features are used to describe matter?**
   1. mass and color
   2. weight and odor
   3. mass and volume
   4. phase and texture
3. **A sample of matter that has neither a definite shape nor a definite volume is in which state of matter?**
   1. solid
   2. liquid
   3. gas
   4. mass
4. **A sample of matter that has no definite shape but does have its own definite volume is in which state of matter?**
   1. solid
   2. liquid
   3. gas
   4. mass
5. **A sample of matter that has its own definite shape and its own definite volume is in which state of matter?**
   1. solid
   2. liquid
   3. gas
   4. mass