**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**TESTING 4 MYSTERY SUBSTANCES LAB**

**PART 1: JUST ADD VINEGAR**

1. **BACKGROUND INFORMATION (Definitions):**

**Physical Change:**

**Chemical Change:**

1. **ASK A QUESTION (Aim):**
2. **HYPOTHESIS (Use if, then, and because statement):**
3. **MATERIALS/APPARATUS (what do you need):**



1. **SAFETY (Identify any safety equipment and procedures for this lab):**
2. **METHOD:**

**Independent Variable:** What is the one thing that will change in your experiment?

**Dependent Variable:** How will you measure your results?

**Constant Variable:** (What are you keeping the same?):

1. **PROCEDURE (list all the steps you do):**

Step 1: Label each watch glass. eg. Powder A, Powder B, Powder C, Powder D.

Step 2: Using a scoopula, place powders A-D onto the labelled watch glass.

Step 3: Record your observations of each powder in Table 1.1-Adding Vinegar

Step 4:

Step 5

Step 6

Step 7

1. **DIAGRAM:**
2. **RESULTS/OBSERVATIONS:**

**Table 1.1 Adding Vinegar to our Mystery Substances**

|  |  |  |  |
| --- | --- | --- | --- |
| Mystery  Substance | Observation of substance  using 5 senses | What I think **WILL** happen before Vinegar is added? | What **DID** happen when Vinegar was added? |
| **A** | ***Smell:***  ***See:***  ***Touch:***  ***Hear:***  ***Taste:*** |  |  |
| **B** | ***Smell:***  ***See:***  ***Touch:***  ***Hear:***  ***Taste:*** |  |  |
| **C** | ***Smell:***  ***See:***  ***Touch:***  ***Hear:***  ***Taste:*** |  |  |
| **D** | ***Smell:***  ***See:***  ***Touch:***  ***Hear:***  ***Taste:*** |  |  |

1. **RESULTS (looking at your observations):**

Table 11.2-Types of Changes seen by substances

|  |  |
| --- | --- |
| **Mystery Substances** | **What type of change did you see with each substance?**  **Explain briefly why you think so?**  **(Use your definitions at beginning of lab)**  **Physical Change or Chemical Change** |
| **A** |  |
| **B** |  |
| **C** |  |
| **D** |  |

1. **CONCLUSION (relate to Aim, Hypothesis, and Results):**
2. Did all the powders react the same?
3. Were your predictions correct (look at Aim, Hypothesis, and Results?)