

Name \_\_\_\_\_

Period \_\_\_\_\_ Date \_\_\_\_\_

Teacher \_\_\_\_\_

## Alike or Different

### Purpose:

What are some properties of a variety of substances?

### Materials:

Substance A

Substance B

Substance C

### Procedure:

1. Place one spoonful of each substance in the labeled well.
2. With a hand lens, look closely at each substance.
3. Rub a little of one substance between your fingers. Repeat with each of the other substances. **Be careful not to mix substances! Don't taste any substance!**
4. Record your observations in the Data Table.
5. Clean your hands after touching each substance.
6. Add one dropperful of water to each substance.
7. Record any Changes in Data Table.
8. Repeat Step 6, using vinegar instead of water.
9. Record any Changes in Data Table.
10. Repeat Step 6, **using only 1 DROP** of Iodine.
11. Record any Changes in Data Table.

Data: Record 2-3 observations in each box below for each substance.

Substance	Substance A	Substance B	Substance C
Properties (Color, texture, appearance)			
Properties with Water			
Properties with Vinegar			
Properties with Iodine <b>(1 DROP ONLY)</b>			

**Lab Response Questions:**

1. What are 3-4 properties of each of your substances? Which of these are **Physical Properties** and which are **Chemical Properties**? Make certain you include at least one Chemical Property and one Physical Property for each substance.
  - a. Substance A (Write 3-4 properties and identify each as CP or PP)
  - b. Substance B (Write 3-4 properties and identify each as CP or PP)
  - c. Substance C (Write 3-4 properties and identify each as CP or PP)
2. Based on our observations, which of the substances can you group together? Explain how and why you would group them that way.(Answer both questions)
3. Reflection: What did you learn from this lab?

**Directions: Answer each question in complete sentences below.**

**Lab Response Questions:**

1. What are 3-4 properties of each of your substances? Which of these are **Physical Properties** and which are **Chemical Properties**? Make certain you include at least one Chemical Property and one Physical Property for each substance.
  - a. Substance A (Write 3-4 properties and identify each as CP or PP)
  - b. Substance B (Write 3-4 properties and identify each as CP or PP)
  - c. Substance C (Write 3-4 properties and identify each as CP or PP)
2. Based on our observations, which of the substances can you group together? Explain how and why you would group them that way.(Answer both questions)
3. Reflection: What did you learn from this lab?

**Directions: Answer each question in complete sentences below.**

**Lab Response Questions:**

1. What are 3-4 properties of each of your substances? Which of these are **Physical Properties** and which are **Chemical Properties**? Make certain you include at least one Chemical Property and one Physical Property for each substance.
  - a. Substance A (Write 3-4 properties and identify each as CP or PP)
  - b. Substance B (Write 3-4 properties and identify each as CP or PP)
  - c. Substance C (Write 3-4 properties and identify each as CP or PP)
2. Based on our observations, which of the substances can you group together? Explain how and why you would group them that way.(Answer both questions)
3. Reflection: What did you learn from this lab?

**Directions: Answer each question in complete sentences below.**