

Unit
4

Handout

Physical and Chemical Change Lab

Purpose: To identify physical and chemical changes.

- Procedure:**
1. Add a small amount (just 1-2 cc) of each powder to the correct spot on the sheet.
 2. Add 1-2 drops of water to the first powder. Record any observations in the space provided on the table.
 3. Repeat step 2 for all powders.
 4. Repeat steps 2 and 3 using the next liquid.
 5. Clean up your lab by rinsing off the sheet in the sink.

Safety: Goggles must be worn at all times.
Do not touch the iodine solutions with your bare skin.
Aprons must be worn to prevent your clothes from being stained.

Data Table: In the change column record "Physical" or "Chemical." In the evidence column describe how you know (this is your observations).

Mixed:	Water		HCl (1%)		Iodine Solution	
Substance	Evidence	Change	Evidence	Change	Evidence	Change
Baking Powder						
Baking Soda						
Cornstarch						
Sugar						

Question 1 Which powder had a chemical reaction with water? _____

What evidence did you have that the chemical reaction happened?

Question 2 Which powder had a chemical reaction with vinegar? _____

What evidence did you have that the chemical reaction happened?

Question 3 Which powder had a chemical reaction with iodine? _____

What evidence did you have that the chemical reaction happened?

Question 4 A student observes water boiling. They incorrectly state that this is an example of a chemical change because bubbles are forming. Why is this student incorrect? _____

Question 5 A student mixes two clear chemicals together. After stirring the chemicals for a minute, the liquid turns a dark black color. Is this an example of a physical or chemical change? How do you know?
