

Mystery Powder Lab

Glue this side
down into your
science notebook.

“A dot is a lot!”

This is a modified version from the
original posted at
<http://sciencespot.net/Pages/classchem.html#Anchor2>
Teacher info provided.

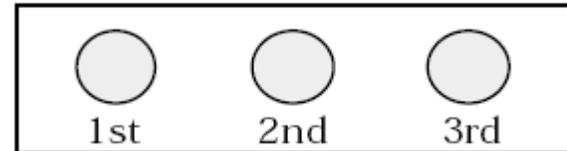
Flow Chart to Determine Powders:
[http://sciencespot.net/Media/
cookiemys_flowchart.pdf](http://sciencespot.net/Media/cookiemys_flowchart.pdf)

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IMPORTANT: Each person should test only one powder at a time! **DO NOT ALLOW SAMPLES TO MIX TOGETHER!**

FOR EACH SAMPLE:

Step 1: Place 3 small samples of your powder (about half the size of a dime) into the micro-wells.



Step 2: Describe your powder sample and write your observations into the data table.

Step 3: Add 4 to 5 drops of **Cabbage Juice** to the 1st well and mix using a clean toothpick. Record your observations.

Step 4: Add 4 to 5 drops of **VINEGAR** to the 2nd well and mix using a clean toothpick. Record your observations.

Step 5: Add 4 to 5 drops of **IODINE** to the 3rd well and mix using a clean toothpick. Record your observations. **CAUTION:** Iodine will stain clothing, hands, and anything it touches!

Step 6: For the **HEAT** test, place a small amount of powder on a clean square of aluminum foil. Bend the edges up to create a “cup” and hold onto it using a pair of tongs or tweezers.

Hold the sample over the candle flame for a few seconds. Record your observations in the chart. **CAUTION:** Follow all lab safety rules when working with fire.

CLEAN UP YOUR AREA BEFORE YOU LEAVE

Sample #	Description	Cabbage Juice pH test	Vinegar Test Fizz (+)	Iodine Test Black/Purple (+)	Heat Test Black, Bubbly (+)
1					
2					
3					
4					
5					
6					

- 1. Using your flow chart, determine the identities of the mystery powders.**
- 2. Write the sample numbers into the boxes on the flow chart, and have your work verified.**
- 3. Do not share your results with any other groups.**