

**\*\*\*\*You must wear goggles at all times\*\*\*\***

## **Crime Busters-Case of the Science Sabotage-2010 Sample**

### **The Crime:**

After lunch Mr. White was drawing a cell on the board and had his back to the classroom. Just as the bell rang he was hit in the head with a flying paper wad. Questioning of the students revealed five likely suspects. The piece of paper was found at the front of the lab. On it was written "Math test Monday" and "bring swim snack". It looked like the writing was from two different people. There were two fingerprints on the note. There were some white powders on the note. Various white powders were found under the chairs the five suspects sat in. Determine who the likely culprit is.

### **The Evidence:**

- 1)Fingerprints found on the note (**at evidence station**)
- 2)Two pens used to write the messages on the note thrown at Mr. White (**go to the chromatogram station** to put ink samples on your test strips. Perform the analysis at your work station)
- 3)White powders found on the note and under the chairs the suspects sat in (lab materials at your station)

### **Suspect Data file (at the suspect station):**

- 1)Fingerprints for each suspect-compare these to the ones at the evidence station
- 2)Chromatograms of ink from each of the suspects' favorite pens/markers-compare these to the chromatograms you are doing.

### **The Suspects:**

Mr. White only teaches from lunch until the end of the day. No one was in the classroom prior to lunch and classes for the remainder of the day were sent to another room while the investigation was completed. Custodians had thoroughly cleaned the room the night before the incident.

Criminal-Powders in cups X and Y were found on the note

Butch-Powders in cups C and D were found under this chair.

Sandra- Powders in cups E and F were found under this chair.

Larry- Powders in cups G and H were found under this chair.

Kathy- Powders in cup J and K were found under this chair.

Wyatt- Powders in cups L and M were found under this chair.

The pens that match the ink on the note are labelled BIZ and SAS

This is a list of the powders you may find in the 12 cups. Eight cups have one powder. Four cups have two powders mixed together.

baking soda  
sugar

cornstarch  
salt

flour  
sand

limestone  
gypsum

*You must clean up your work station before leaving. Put lids on all the cups and wipe up all water, powder and spills.*