

Mysterious Murder Worksheet

Part 1. Test for Poison

	Refrigerator Liquids				
	Stomach Contents	Fruit Punch	Catsup	Fruit Smoothie	Clear Liquid
Contains Poison					

Was Mr. Mathematics poisoned? If so, what is the most likely substance?

Test 2. Shoe Print

Length of Shoe	Size of Shoe

Comparative Shoe Size Chart

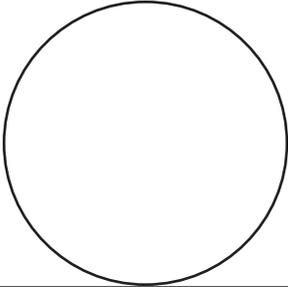
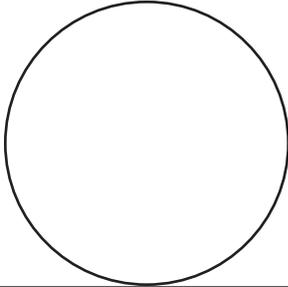
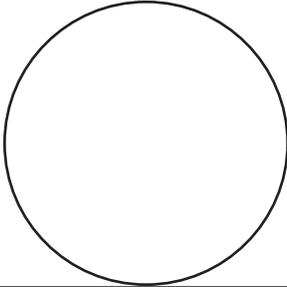
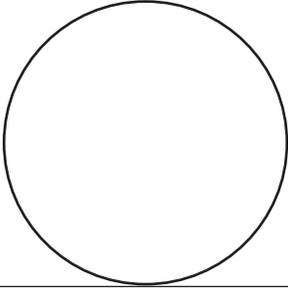
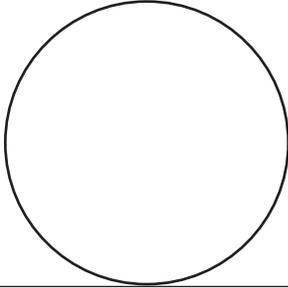
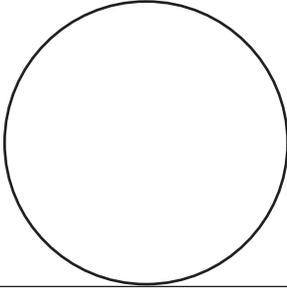
Shoe Size	Length
5	253 mm
6	262 mm
7	270 mm
8	279 mm
9	288 mm

Looking at the size of the shoe in the Data Table above, does the shoe evidence point to any one person who may have poisoned Mr. Mathematics? Does it show that someone may not have been involved?

Test 3. Fiber Analysis

Initial Observations		
Cotton Fiber	Nylon Fiber	Crime Scene Fiber

Microscope Sketches

	Cotton Fiber	Nylon Fiber	Crime Scene Fiber
Low Power			
High Power			

Flame Test Observations

Cotton Fiber	Nylon Fiber	Crime Scene Fiber

Looking at the fiber observations from the data tables above, does the fiber evidence point to any one person who may have poisoned Mr. Mathematics? Does it show that someone may not have been involved?

Test 4. Blood Analysis

Blood Sample	Anti-A Sera	Anti-B Sera	Blood Type
Crime Scene			
Person V			
Person W			
Person X			
Person Y			
Person Z			

Looking at the blood analysis data in the table above, which suspects may have been involved in the death of Mr. Mathematics? Does the blood analysis show that any suspect would not have been involved?

Test 5. Fingerprint Analysis

Suspect Fingerprints	Crime Scene Fingerprint Match
Person V	
Person W	
Person X	
Person Y	
Person Z	

Looking at the fingerprint analysis data in the table above, who may have been involved in the death of Mr. Mathematics based on the right thumb print found at the scene of the crime?

Post-Lab Questions *(Use a separate sheet of paper to answer the following questions.)*

1. As a result of the analysis of Mr. Mathematics' stomach contents, what was the likely cause of Mr. Mathematics' death? Explain.
2. Based on the shoe size data from Coach Crunch, whose shoeprint may have been found at the scene of the crime? Explain.
3. Based on the fiber analysis, whose clothing fibers may have been found at the scene of the crime? Explain.
4. In the blood type analysis, each suspect was assigned a letter for his blood sample. Use the key below to match the sample's letter with the suspect. Whose blood may have been found at the scene of the crime? Explain.

Sample Letter	Suspect
V	Martin Mascot
W	Stanley Student
X	Henry History
Y	Lenny Language
Z	Bobby Booksmart

5. In the fingerprint analysis, each suspect was assigned a letter. They are the same letters used for the blood analysis. Whose fingerprints were found at the scene of the crime? Explain.
6. Is there any one test that could have been performed to determine the identity of the suspect? Were any of the other tests unnecessary? Explain.