

# CRIME BUSTERS

## TROY INVITATIONALS

### 2/3/2012

	Total Number Wrong	Total Possible Answers	%	
Part a Qualitative Analysis	14	50	50	_____
Part b Hairs, Fibers, or Plastics	7	10	10	_____
Part c Chromatography	1	5	5	_____
Part d Crime Scene Evidence	1	10	10	_____
Part e Analysis	44	25	25	_____

Sub Points Value \_\_\_\_\_

Must leave the work area clean, dispose properly,  
and do not use containers as the spot plates.

(Up to 10%)

Deduction \_\_\_\_\_

Total Points Value \_\_\_\_\_

Rank \_\_\_\_\_

Team Name \_\_\_\_\_

Team Number \_\_\_\_\_

# CRIME SCENE INFORMATION

On Saturday, February 4, 2012, the police were called to the local bingo hall. This note was left in the locker of the bingo caller.

**THANKS FOR nOT CALLING  
MY NUMBERS TONiGHT.  
To SHOW YOU HOW HAPPY  
I aM, I sLaShEd YoUR TIRES.  
HavE a Good Night!**



The note was signed using an ink blotter. Paper Chromatography - Question No. 22

There was a fingerprint found on the note. It was determined that the fingerprint was from the right hand index finger. - Question No. 23



## Found at Crime Scene

- Liquid - Evidence No. 9
- Powder - Evidence No. 10 (mixture of two powders)
- Powder - Evidence No. 11 (mixture of two powders)
- Powder - Evidence No. 12
- Metal - Evidence No. 13
- Metal - Evidence No. 14
- Fiber - Evidence No. 15
- Fiber - Evidence No. 16
- Plastic - Evidence No. 21

# SUSPECTS INFORMATION

**All of the women sit together** at the front table near the southwest exit door.

All of the women were extremely upset because they didn't like staying after the game because they wanted to get home and watch the Mentalist on CBS.

## **Suspect No. 1**

Evidence Nos. 1 and 2 (powders)

Evidence No. 17 (from the drink cup filled with Coke)

She was wearing a brown cotton (vegetable) sweat suit.

Right-hand index finger: loop

Left-hand index finger: loop

Hobby: Creates jewelry using copper

While tearing up her bingo papers, she got a paper cut.

She went into the locker room to retrieve the first aid kit.



## **Suspect No. 2**

Evidence Nos. 3 and 4

Evidence No. 18 (from the ketchup bottle used for her hot dog)

She was wearing a brown polyester (synthetic) shirt and blue jeans

Right-hand index finger: whorl

Left-hand index finger: whorl

Hobby: Creates earrings from recycled aluminum

She is an environmentalist with a sunny disposition.



## **Suspect No. 3 (sister of Suspect No. 4)**

Evidence No. 5

Evidence No. 19 (from the water bottle)

She was wearing a brown cotton (vegetable) & brown polyester (synthetic) pants.

Right-hand index finger: arch

Left-hand index finger: whorl

Hobby: Creates iron energy wristbands

Her first night back to playing bingo since she recovered from a stroke.

## **Suspect No. 4 (sister of Suspect No. 3)**

Evidence Nos. 6, 7, and 8

Evidence No. 20 (from the drink cup filled with Red Pop)

She was wearing a brown leather (animal) lined with nylon (synthetic) dress

Right-hand index finger: loop

Left-hand index finger: arch

Self-employed at a hardware store

Name \_\_\_\_\_ School \_\_\_\_\_

Team No. \_\_\_\_\_

- 1 \_\_\_\_\_ Name the Powder (Suspect No. 1)
- 2 \_\_\_\_\_ Name the Powder (Suspect No. 1)
- 3 \_\_\_\_\_ Name the Powder (Suspect No. 2)
- 4 \_\_\_\_\_ Name the Powder (Suspect No. 2)
- 5 \_\_\_\_\_ Name the Powder (Suspect No. 3)
- 6 \_\_\_\_\_ Name the Powder (Suspect No. 4)
- 7 \_\_\_\_\_ Name the Powder (Suspect No. 4)
- 8 \_\_\_\_\_ Name the Powder (Suspect No. 4)
- 9 \_\_\_\_\_ Name the Liquid (Crime Scene - on the floor by locker)
- \*10 \_\_\_\_\_ Name the **two** Powders (Crime Scene - on the floor in front of locker)
- \*11 \_\_\_\_\_ Name the **two** Powders (Crime Scene - inside of the locker)
- 12 \_\_\_\_\_ Name the Powder (Crime Scene - by the room's exit door)
- 13 \_\_\_\_\_ Name the Medal (Crime Scene - on the floor)
- 14 \_\_\_\_\_ Name the Medal (Crime Scene - on the floor)
- 15 \_\_\_\_\_ Type of Fiber: Animal, Vegetable & Synthetic (Crime Scene) Found on the latch of the locker door
- 16 \_\_\_\_\_ Type of Fiber: Animal, Vegetable & Synthetic (Crime Scene) Found on the latch of the locker door
- 17 \_\_\_\_\_ Type of Plastic: PETE, HDPE, PS, LDPE, PP, and PVC (Suspect No. 1)
- 18 \_\_\_\_\_ Type of Plastic: PETE, HDPE, PS, LDPE, PP, and PVC (Suspect No. 2)
- 19 \_\_\_\_\_ Type of Plastic: PETE, HDPE, PS, LDPE, PP, and PVC (Suspect No. 3)
- 20 \_\_\_\_\_ Type of Plastic: PETE, HDPE, PS, LDPE, PP, and PVC (Suspect No. 4)

Name

School

Team No.

21 \_\_\_\_\_

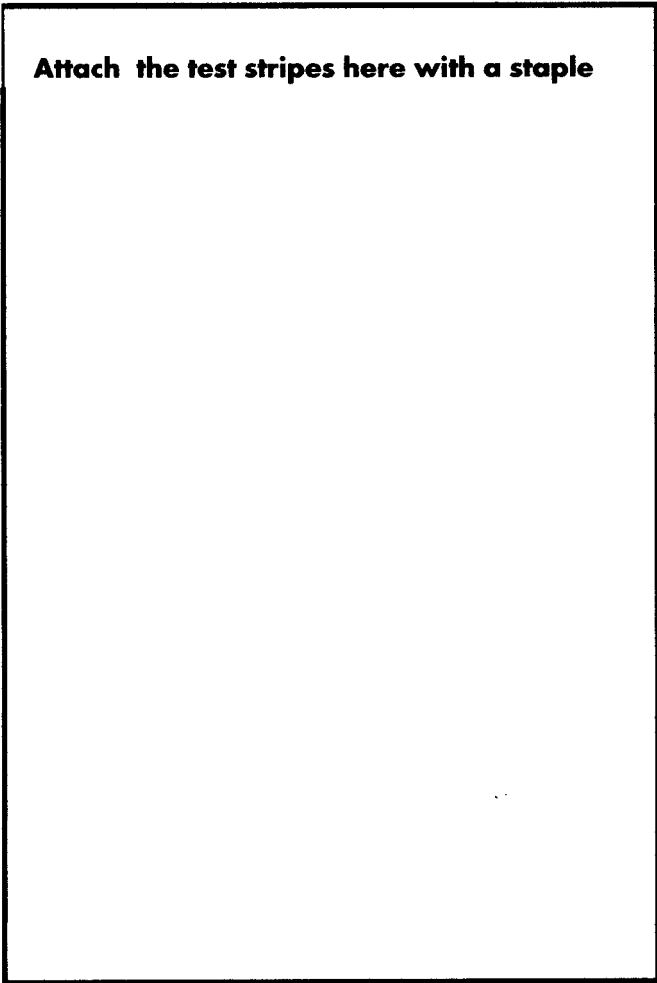
Type of Plastic: PETE, HDPE, PS, LDPE, PP, and PVC (Crime Scene)

22 \_\_\_\_\_

Which suspect(s) could the blotter signature belong to?  
Results of the paper chromatography must be attached in the box below to receive credit for a correct answer(s).

\_\_\_\_\_

**Attach the test stripes here with a staple**



23 \_\_\_\_\_

Name the suspect(s) who may match the fingerprint found at the crime scene.

\_\_\_\_\_

\_\_\_\_\_

FOR THE ANALYSIS, DETERMINE WHO THE MOST LIKELY SUSPECTS IS/ARE (PROVIDE EVIDENCE). THEN EXPLAIN WHY YOU DID NOT SELECT THE OTHER SUSPECTS (PROVIDE EVIDENCE).

