

Name of CSI Detectives: _____

School: _____ Team No. _____ Work Station No. _____

Your Work Station

Each team will have its own workstation. Each workstation has a full set of fifteen unknown substances, a dropper bottle of iodine, and a dropper bottle of 0.1 M HCl. Attached to the back of this packet is a copy of the DNA analysis, fingerprints and the paper chromatography report form. The DNA, fingerprint and chromatograms have been identified with the initials of the suspects.

Safe Laboratory Procedures:

1. If you are observed using unsafe lab procedures such as tasting chemicals, removing safety goggles, etc., you will be disqualified.
2. Use minimal amounts of each of the unknowns provided. Using a clean spatula or similar device for each chemical, remove a small sample of the unknown from the container. Place the sample on a plate or similar device on which the identification tests may be performed.
3. Use extreme caution when working with all substances. Should an accident occur, alert a supervisor immediately.
4. After completing the exam, clean and organize your workstation. Then notify a supervisor that you have completed the lab. Points will be deducted for stations left unclean and/or disorganized.

The Crime Scene

Crime has struck the Science Olympiad! Last night, after the event supervisors had finished setting up their events for today, a break-in occurred. The crime was discovered early this morning when the tournament director arrived to open the building.

You are the Crime Scene Investigators – CSI detectives. It is your task to determine who committed this heinous crime before the competition begins. You have only 50 minutes to analyze all items of evidence collected at the scene of the crime and identify which of four suspects is most likely to have committed the crime.

Good Luck, CSI Investigators!

Suspects

Hand N. Cookijar, the school cook, is bored with preparing meals for the Science Olympiad contestants, especially since it requires working on his day off. He especially dislikes baking the cakes for the Award Ceremonies because of the extra time required to scour his pots and pans. The evidence found on him matches the:

Unknown samples in containers: **3, 4, 9, 10 and 11**

DNA: **HC**

Fingerprint: **HC**

Paper chromatography: **HC**

Robyn U. Blind, the groundskeeper, is tired of cleaning up after the Science Olympiad contestants who tend to leave litter scattered about her well-fertilized, green lawn. The litter nearly fills the dumpster, leaving little space for the regular trash. She’d much prefer using her extra time sharpening lawn tools than cleaning up after students she believes should spend their Saturdays at home. The evidence found on her matches the:

Unknown samples in containers: **5, 6, 7, 8, 10, 12, and 14**

DNA: **RB**

Fingerprint: **RB**

Paper chromatography: **RB**

A. Way Withit, the team bus driver, is irritated that she must earn her extra income escorting the SO team to their Saturday competitions. She much prefers driving teams to athletic events where she sometimes volunteers to assist in timing events and also acts as medic for minor scratches and sore muscles. The early morning moisture condensing on windows encourages participants to scrawl messages on the bus windows requiring her to clean the windows with foul-smelling chemicals. To her, these adolescents are simply too loud, too rude and much too messy. Her irritability often results in severe cases of heartburn. The evidence found on her matches the:

Unknown samples in containers: **1, 6, 9, 12 and 15**

DNA: **AW**

Fingerprint: **AW**

Paper chromatography: **AW**

Am I. Gilltie, the school custodian, is tired of cleaning up after the Science Olympiad team. This extra-curricular activity always generates extra trash requiring him to make numerous trips to the dumpster. This extra effort frequently irritates his back. He is often upset at having to share his workspace with the groundskeeper, although both share a similar obsession for maintaining sharp tools. The evidence found on him matches the:

Unknown samples in containers: **2, 7, 9, 10, 14 and 15**

DNA: **AG**

Fingerprint: **AG**

Paper chromatography: **AG**