

THE CASE OF THE MISSING COMPUTER CHIP: MAKE-UP ASSIGNMENT

(IT'S PLUM CRAZY TO STEAL FROM US)

INTRODUCTION

It's the morning of July 5 in the northern California city of Cupertino. You are working the burglary watch, day shift. As commander of the electronic theft division you have a team of experts, skilled in the collection of all types of evidence relating to theft of computers and electronic stuff. At 9:50 a.m. you get a call that someone has attempted to steal an advanced chip from the Plum Computer Company. You and your team respond immediately to the call. When you arrive, you find that the plant is sealed off and all the uniformed employees in the plant have been confined to a single room, the lounge. Within the hour, the missing chip is found in an envelope in a pile of mail. The envelope was addressed to Gordon Lidy, the security chief of a rival computer firm. A cassette tape was also found in the envelope.

You assign one of your best officers, JoAnn Lane, to interview everyone present. Here is what she finds:

- A. Steve Randak, the president, arrived at 8:50 this a.m. to find the tone-operated security door to his private lab open and the prototype of his new computer chip missing. He immediately pushed the panic button that alerts security to close the gates. The guard at the gate reported that no person had left the plant since 8:00 a.m. today.
- B. A map of the crime scene
- C. Jo Ann begins accumulating clues, and as she does, tries to develop a hypothesis for how it was done, and who did it. She keeps her clues in an envelope.

INSTRUCTIONS for each team:

1. Cut the clues up into individual boxes. There should be 14 of them. Put them into an envelope. Try not to read them as you do this!
2. Read the Introduction (above) and study the map of the crime scene (overpage).
3. After reading the above introduction and studying the map of the crime scene, you should draw 5 (five) clues at random from the envelope.
4. Using the information at hand, try to solve the crime. You can organize the evidence in various ways, until you develop a number of tentative hypotheses. Commit yourself by writing down every hypothesis. YOU must write down the hypotheses you come up with on a piece of paper. Once you have exhausted all your ideas with these clues, move on to step 5.
5. More evidence can be uncovered. You may now draw 3 (three) more clues from the envelope, at random. Repeat step 4 updating hypotheses and coming up with new ones. Once you have exhausted all your ideas with these new clues, move on to step 6.
6. Draw 3 more clues, and continue as before updating and refining. Once you have exhausted all your ideas, move on to step 7.
7. Draw the last 3 clues, record your final hypothesis for what happened, and who was probably responsible. Be able to defend your hypothesis. Also indicate who didn't commit the crime and how you eliminated them from suspicion.
8. Write a short paragraph when you are done analyzing your activities in trying to solve this crime. What elements were at work, which are also found in the process of SCIENCE?

Missing Computer Chip Mystery

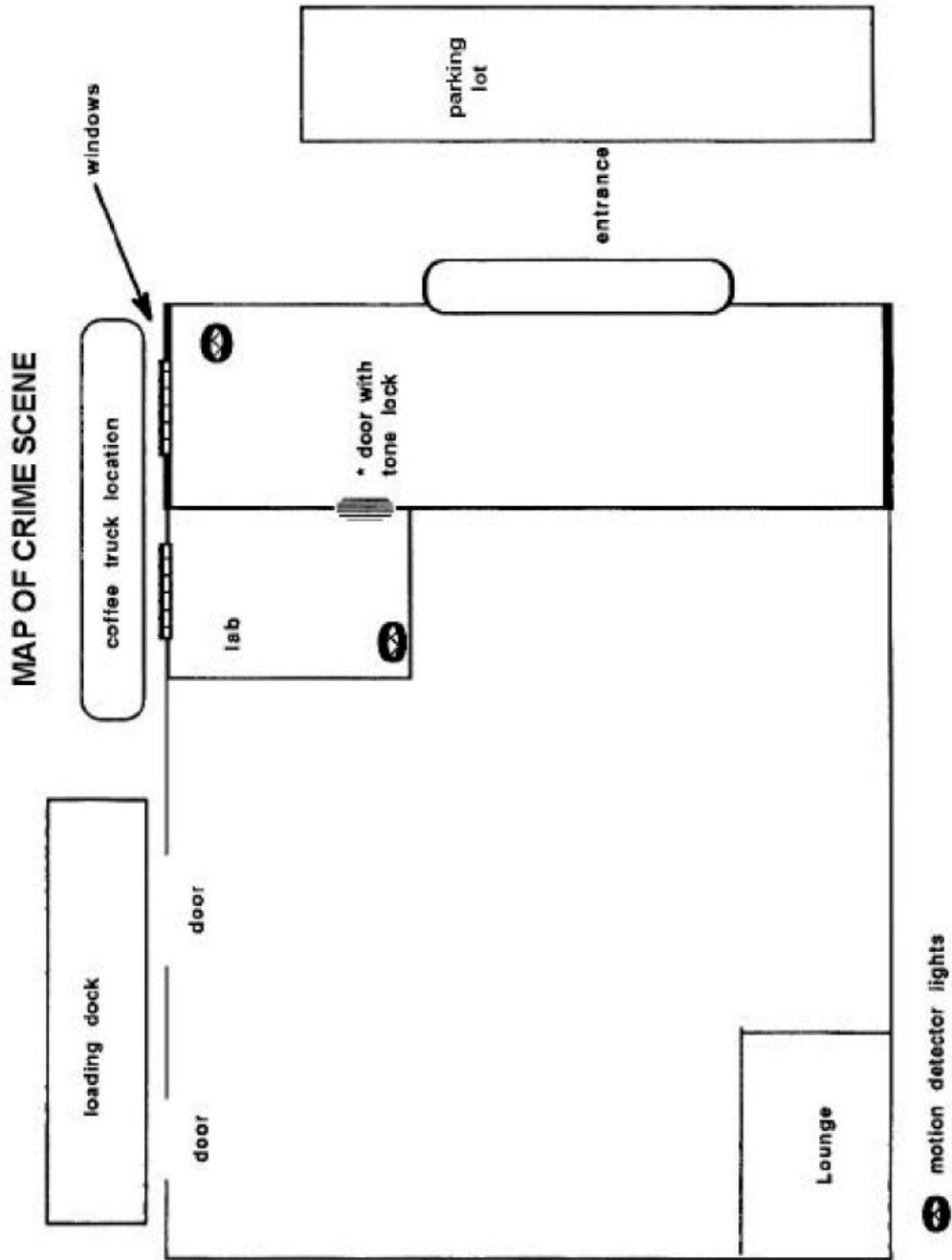
- 1) How was the process you went through to determine the thief like the process of doing science? Be specific! _____

- 2) In percentage, how sure are you that you figured out the crime? _____

- 3) Can you ever be 100% certain of something in science? _____

- 4) Can you ever be 100% certain that someone committed a crime? If so, how? _____

Crime Scene Map



* tone lock combination known only to president and assistant.

McNabb, Watts, Willey

14 CLUES: Cut up into individual boxes and place in an envelope.

<p>Doug, the man who operates the coffee cart in the parking lot (see map) reports that he has not seen any strangers today. In fact, this is what he reports: "I saw the security guard arrive at 7:00 for the shift change, same time as Cowboy Paul's delivery truck. The security guards came out playing with those night sticks and the Cowboy was listening to that 'Hillbilly' music on his headphones, when they came out for a cup of coffee."</p>	<p>According to Coffee Cart Doug, the lab assistant, Ginny, "arrived at 7:15, turned the lights on in the office for about 5 minutes, just like always. And then about 7:50, the lights came on and I could see Ginny working in the lab."</p>	<p>Coffee Cart Doug reports: "About 7:30, the lights came on again in the lab for about 5 minutes. They have those motion sensor lights, you know."</p>
<p>Coffee Cart Doug reports: "Then at 8:00 the loading crew arrived and started unloading Cowboy Paul's delivery truck."</p>	<p>Coffee Cart Doug reports: "Nobody else came or left till Randak arrived at 8:50 which was actually early for him. Couple minutes later the police arrived."</p>	<p>Ginny reports: "I got to work at the usual time and opened the office just before 8:00. Nothing unusual happened."</p>
<p>Security Guard Jim's statement: "My shift starts at 7:00; I had a cup of coffee with Cowboy Paul and Buck, the night guy; then I did my rounds and found everything was secure."</p>	<p>Cowboy Paul's statement: "I arrived about 7:00 a.m., had coffee with the security guards and waited for the loading crew to unload my trailer. I was just about to leave when the alarm went off and I got locked in. "</p>	<p>MOTIVE: Cowboy Paul: Seems to live beyond his means according to security guard; drives Porsche and wears Rolex watch. Owns three Kentucky thoroughbred race horses. But he still loves Levis. He needs money.</p>
<p>MOTIVE: Security Guard Jim: 'Hacker'; wants to be the first on his block to have new stuff.</p>	<p>MOTIVE: Ginny Fletcher: Actually developed algorithm for this computer chip and has received no financial or professional recognition for her contribution. She feels shortchanged.</p>	<p>EVIDENCE: Fingerprints: In the lab a single partially smudged print was found and since all employees have prints on file, it was easily ascertained it belonged to persons unknown.</p>
<p>EVIDENCE: Fiber Evidence: A small thread that was later identified by the police as denim was found by Randak when he microscopically examined the chip to verify it as his missing chip. Also found were small white crystals of sugar.</p>	<p>EVIDENCE: Misc. Evidence: The door to the private lab is secured by a tone lock. Known access is limited to president and assistant.</p>	