### Forensics
#### Scenario #1

<table>
<thead>
<tr>
<th>Names/Prop.</th>
<th>Powders</th>
<th>Polymer</th>
<th>Fabric</th>
<th>Fingerprint(s)</th>
<th>IR/UV</th>
<th>Paper/Gas Chromatography</th>
<th>Other?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jack</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jill</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jeremy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jessica</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Develop a chart similar to the one shown above to assist you in organizing your ideas to create the **Crime Scene Analysis**.

2. Remember to include all the reasons **WHY** you think one or more of the suspects are guilty, but also include all the reasons **WHY** you eliminated the other possible suspects.

3. Remember you may not always be given enough information for naming a single guilty party.

4. Make the chart large enough to include all the data that you observe.

5. Finally, not every problem will include data from all the columns, but I would predict that all problems—regional, state, or national—will include the first three columns of powder, plastics (polymer), and fabric.

### Descriptions:

**Jack** is a master mason. Jack is very good at his job and makes a good living when he is working. The problem is that Jack works only when the weather is good. He cannot work when it is raining or when the temperatures drop below the freezing point. Thus Jack is always looking for ways to make more money. His work clothes are made of cotton and, of course, fully impregnated with calcium carbonate. He uses a red Faber
Castell felt pen for working up estimates for new jobs and carries the pen with him at all times. When questioned by police he had a number of polystyrene utensils in his pockets that were used to stir and level concrete. Police took fingerprints from Jack and the other suspects. All fingerprints are found below.

**Jill** is a nurse who works the midnight shift seven days a week at the local hospital. She is married to **Jeremy** who currently does not have a job. He was an engineer with a high tech company, but was recently downsized due to the poor economic climate. They have six children ages 3, 6, 9, 16, 18, and 20. The two oldest children are currently in college. The three oldest work part-time but need help from mom and dad to meet all their expenses. Both the adults wear cotton clothing, but Jeremy does wear a wool Pittsburgh Steelers cap to protect his balding pate. Jill’s nursing cap is made of a polyester. Both Jeremy and Jill share a hobby of sculpting with polymethylmethacrylate. Jeremy bought a package of ten red felt tipped Roseart pens when he was last at the stationary store. Jill has access to a wide range of chemicals as a part of her nursing duties, including boric acid. Jeremy has been working part-time in construction. Last week he broke his arm. His left arm is now in a short plaster (of paris) cast.

**Joan** is a recent high school graduate working for a local bakery. She makes minimum wage. In her job she uses a number of common household materials, thus is not a surprise that her clothing contains powdered cornstarch. The bakery supplies red Galaxy pens and polyester uniforms. The bakery uses plastic bags made of LDPE.

**Jessica** is a recent drop out from the local vocational technical school. She has got a job as an apprentice plumber working with her father. She has been wearing wool clothing since the plumbing work is out-of-doors, building new homes and refurbishing older ones. She studied working with PVC pipe while in school and has made good use of those skills. She has a history of foot problems, thus she carries Epsom salts with her always. She uses a red Vis A Vis felt tipped pen for writing down directions to a job.

**Crime**

A bank was held up recently. The burglar gave a note to teller. It said, “GIVE ME ALL YOUR CASH”. It was written with a red pen on white paper. A number of fingerprints were found at the teller’s window. In addition a white powder was found near the teller’s cage. It along with a fabric sample and a piece of unknown plastic found at the scene were sent along with the note to the police forensics lab.

**PROBLEM**

Determine the culprit from the list of suspects listed above. Do an analysis of the crime/scene.