

## Lab Report Outline

### Lifting Prints with Dusting Powders and Chemicals

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#### Introduction:

1. Compare visible, plastic and latent prints.
2. How can latent fingerprints be detected, preserved and developed at a crime scene?

**Problem:** How can fingerprints lifted from a crime scene help solve the crime?

#### Data:

1. Fingerprints lifted with black powder
2. Fingerprints lifted with white powder
3. Handprint lifted with magnetic powder
4. Fingerprint lifted with iodine fuming
5. Fingerprint lifted with ninhydrin
6. Fingerprint lifted with silver nitrate
7. Fingerprints lifted with superglue fuming
8. An unknown print lifted at the crime scene

#### Analysis:

1. Identify 8 points of minutae on each print lifted with powders and chemicals.
2. Identify 8 points of minutae on the unknown print.
3. Explain how computers are useful in a fingerprint lab.

#### Conclusion:

1. What types of surfaces lend themselves to dusting techniques?
2. What do iodine fumes react with to make the prints visible?
  - a. Why is the developed print only temporary?
3. Which technique is used most often in the crime lab to develop prints?
  - a. Why is this the method of choice?
4. If more than one method is to be used to develop prints, the order in which the techniques are used is important. List the order in which you would employ the iodine fuming, silver nitrate and ninhydrin methods on the same print and explain why.
5. Describe the new technologies that have recently made great changes in the way fingerprints can be detected and how they can be used as evidence.
6. How can fingerprint evidence be made non significant?
7. How do courts of law determine what kind of scientific evidence is admissible in court?
8. Answer the problem for this lab.