CRM342 – Practical Experiment B  
Trace Sample Collection and Preservation

Materials Needed:
- Metal or plastic tweezers
- Four (4) sheets of paper (at least)
- High-powered or very bright flashlight
- Four (4) small coin or manila envelopes (at least)
- Tape for sealing evidence
- Two (2) small glass plates (dessert size or dinner size)
- Two (2) butter knives
- Two (2) forks
- Camera (digital or film)
- Notebook and writing instrument to document findings

Descriptive/Instructions:
Utilizing simple items found in most homes, you will collect and preserve samples of physical trace evidence.

Hair: Looking through your closet, identify two items of clothing. Visually examine the clothing with a high-powered (bright) flashlight looking for trace hairs. Locate and collect (using a pair of tweezers) TWO (2) hairs that do not appear to be your own. Place each hair sample in the center of a folded piece of paper so that each sample is collected and packaged separately for preservation. Fold the paper into four sections, being careful not to “crush” the hair samples. Place each collected sample in individual small coin/manila envelopes and seal each with the date/time and your initials, as well as where it was collected and from what item/surface.

Fibers: Follow the same procedure you completed for collecting and preserving the two hair samples.

Soil: Finally, if available to you, collect a teaspoon of soil from a known location and deposit the soil onto a glass plate. On a separate plate, remove soil found on an “unknown” item; in this case, use the bottom of a shoe worn by someone in your home (you can use a butter knife to do this but use caution with any sharp objects). Using a high-powered (bright) flashlight and a metal fork, carefully “sift” through your known and “unknown” soil samples, notating and observing if there are any unusual materials or similar particles present.

Photograph and document all your findings, determining whether Locard’s Exchange Principle is evident in trace evidence collection.

Note: If you purchased the CRM230 criminalistics student kit, you may have some of the tools necessary to collect your samples. Feel free to use any of those tools.