



Short-term vs. Long-term Latent Fingerprint Sample Lab

Name: _____ Date: _____

Background: As you know, fingerprint impressions can remain in place for surprisingly long periods of time, however, a smudged fingerprint impression holds little value for forensic investigators.

Your challenge is to design an experiment to determine **how long** (short term/long term) fingerprints hold up to **three variables:** cold, heat and moisture using the following materials:

Water (at 3 temperatures)

Tweezers

Aluminum foil

Containers

Scissors

Paper towels

Tape

Please use the **aluminum foil** to make your fingerprint impressions. Remember that oily fingerprints are most easy to 'read' from a forensic scientist's point of view.

Design the **procedure** in the space below. Remember to write it step-by-step so that it could be repeated.



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Design a **data table** in the space below. Remember CONSTANTS and VARIABLES, as well as repeating your experiment to get accurate results.

Conduct the experiment and **record data**, including observations. Remember the data section should not include any results yet.



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Write your **conclusion** given the data above. Remember to include snafus... where was there a possibility for human error? Try to answer the following questions:

1. Describe any differences/similarities between the short-term and long-term latent print samples you created.
2. Was there any fingerprints that were more visible than others?
3. Was there any room for human error?
4. What are your conclusions about latent fingerprints and holding up in various weather situations after conducting this experiment? Where might this experiment go in the future?