

Latent Prints

Forensic Science



Latent prints are impressions left by friction ridge skin on a surface, such as a tool handle, glass, door, etc.

Prints may be collected by revealing them with a dusting of **black powder** and then lifted with a piece of **clear tape**.



Did you know? Camel hair is the most common animal hair used to make fingerprint brushes. Now many brushes (like the one above) are made out of fiberglass.



Photograph latent prints developed with fingerprint powders before lifting them.

Black, gray, or white powder can be applied to a surface with a variety of style of brushes.

The color of the powder should contrast with the color of the surface (e.g., black for light surfaces and gray or white for dark surfaces).

Use a short-hair brush or cotton to remove excess powder.

Use caution when powdering. Avoid over-brushing latent prints and losing clarity

Some investigators use **fluorescent** powder and UV lights to help them find latent prints on multi-colored or dark surfaces.



Magnetic powder can also be used to reveal latent prints. This type of powder works better on **shiny** surfaces or **plastic** baggies or containers.

The **cyanoacrylate** fuming method (often called the super glue method) is a procedure that is used to develop latent fingerprints on a variety of objects.



Ninhydrin is a chemical that bonds with the amino acids in fingerprints and will produce a blue or purple color. It is used to lift prints from surfaces such as paper and cardboard.

Click the icon to
view the Crime 360
Super Glue Video



Top Left: <http://www.stapletonandassociates.com/images/MagPowder.jpg>

Bottom Left: <http://www.ok.gov/osbi/images/ninhydrin%20print.jpg>

Bottom Right: <http://www.forensicsrus.com/images/SupergluePrint.jpg>

Directions:

- 1 – Get a lifting kit from your teacher that contains black powder, brushes, and clear tape.
- 2 - QUIETLY locate an area where you could find numerous fingerprints.
- 3 – You may use your own finger to supply the latent print on a surface.
- 4 – Dip a brush lightly into the container of black powder and then tap off the extra on the lid. You only need a **VERY SMALL AMOUNT** of powder to dust the print.
- 5 – Hold the brush over the print and rotate it between your thumb and fingers. Use the brush to remove any extra powder.
- 6 - Use a small piece of clear tape to lift the print and place it in the box on your worksheet. You may need to press the tape lightly on the print before lifting.

CAUTION: The black powder will be messy and isn't easy to clean up. Don't dust anything without permission!

Clean Up

- 1 – Be sure to use a spray cleaner with paper towels to clean any excess dust
- 2 – If using magnetic dust, use the magnet to clean up excess, then cleaner and paper towels.
- 3 – Leave no trace that our classes were in the hall way!!!
- 4 – Bring all materials back to class and place in the appropriate location.