

At Your Fingertips



The arsonist in this program was identified because of a single “latent” fingerprint found on a piece of paper at the scene of the crime. A latent fingerprint usually cannot be seen until it is treated with a substance that makes its features visible. It is not very difficult to find latent fingerprints on a piece of paper—you can do it in class. Try the following procedure to create your own latent fingerprints.

Materials

- a new notepad or unopened package of white paper
- black tempera paint powder
- transparent tape
- a sheet of newspaper
- a hand-held lens

Procedure

- 1 Lay a sheet of newspaper on top of your desk or lab table.
- 2 Carefully take a sheet of paper from the stack, without touching any part of the paper except the edges.
- 3 Place the paper on a desktop.
- 4 Holding your fingers far apart, press your fingertips firmly onto the paper. Do not roll your hand or move your fingers. Lift your hand off the paper.
- 5 Sprinkle a small amount of paint powder (about one tablespoon) onto the paper.
- 6 Carefully lift up the paper, holding it only by the edges. Hold the paper horizontally above the newspaper. Shake the paper so that the paint covers the entire surface. Dump the excess paint powder onto the newspaper.
- 7 Place a piece of transparent tape over each fingerprint that you can see on the paper.
- 8 With a pen, mark which hand and finger each fingerprint came from.
- 9 Use a hand-held lens to inspect your fingerprints. Look at the three fingerprint patterns below and find the main pattern in each of your fingerprints.



Loop



Whorl



Arch