The National Forensic Science Technology Center (NFSTC) trains the professionals on the latest crime scene investigation techniques. Now you can use some of the same tricks-of-the-trade at home with these three fun activities.

**Lifting Fingerprints**
Fingerprints are everywhere and each one is different! Follow this easy exercise to see how you can collect and preserve fingerprints.

**Supplies:**
- Pencil
- Tiles (or another smooth surface)
- White note cards
- Clear packing tape

**Directions:**
1. Rub the pencil tip quickly against one of the notecards to create “dust”
2. Gently roll your finger across the pencil “dust”
3. Put dusted finger on the tile, applying light pressure and lift straight up
4. Using small square of tape large enough to cover the print (about 2”x2”), gently lay tape across the print, avoiding any air pockets, leave a tab of tape for easy removal
5. Lightly apply pressure to help transfer the print to the tape
6. Peel the tape from the tile and place it on the white card for examination

**Comparing Fingerprints**
Now that you have your print – you can take a closer look at the details. Crimes can be solved by examining the unique patterns of each fingerprint.

**Supplies:**
- Fingerprint card (from above activity or make a print using water soluble ink pad)
- Magnifying glass

**Directions:**
1. Take the fingerprint notecard and place under magnifying glass
2. Look at the ridge lines of the fingerprint to determine if it is an Arch, Loop or Whorl. Some prints have more than one feature.
Paper Chromatography
Even ink has unique characteristics and colors are made by mixing inks together. Black ink contains the largest combination of colors. In this exercise you’ll be able to tell the difference between the inks of three different black markers you can’t see with the naked eye.

Supplies:
- Paper towels cut up in 1”x2” strips
- Three different brands of water-soluble black markers
- Bowl of water

Directions:
1. Using one marker, draw a line on one paper towel strip about half an inch from the bottom; repeat with other markers making three test strips, each with different ink.
2. Dip the first test strip in the water almost to the mark but not touching and put aside.
3. Repeat on the other two test strips.
4. The water will ‘creep up’ through the towel and begin to dissolve the ink. (This is called capillary action.)
5. Watch as the water breaks apart the colors that were used to create the black ink and compare the unique “prints” created from each brand. They could be very different and very colorful!

Learn more about forensic science at [www.forensicssciencesimplified.org](http://www.forensicssciencesimplified.org)
National Forensic Science Technology Center, [www.nfstc.org](http://www.nfstc.org)