

Forensic Science At-Home Activities for Students

The National Forensic Science Technology Center (NFSTC@FIU) trains the professionals on the latest crime scene investigation techniques. Now you can use some the same tricks-of-the-trade at home with these 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 very 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, and 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. Identifications can be made by examining the unique patterns of each fingerprint and matching them up.

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.



The **loop** pattern recurves on itself.



The Arch pattern looks like waves or tents.



The **Whorl** pattern forms a circle or spiral.



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Finger Printing Activity Sheet

Graph it out! How many kinds in class have whorl, loop or arches?	
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Finger print 2:	
	_
Finger print 1:	
If you were to describe your fingerprints to someone else what would you say?	
Now that we know how to lift and compare fingerprints, choose another finger to try.	

Class Case Study

There were some cupcakes for (Insert name of student here) birthday in the classroom. When everyone went to recess, one of the students took them all! The culprit thought they left no evidence behind, but we did a thorough search of the area and found..... a FINGER PRINT! Good thing we know how to read fingerprints. Below is a description of the finger print, based on the description write down who the possible culprit(s) may be.

Finger print description: This finger print has a loop pattern.

Who are your possible suspects?