

Topic

Finger printing

Almost everyone has fingerprints. While your fingerprints are similar to those of other people's, no two people have the same fingerprints. Scientists have studied fingerprints, handprints, and other body prints, including the patterns on people's tongues. **Biometrics** is the science of studying human body characteristics.

Forensic scientists have used fingerprints in criminal investigations as a means of identification for centuries. Fingerprint identification is one of the most important criminal investigation tools due to two features: their persistence and their uniqueness. A person's fingerprints do not change over time.

Fingerprints develop before babies are born. Your fingerprints are made of several layers of twisted skin that formed prior to your birth. These ridges of skin make patterns. Scientists studying fingerprints identified three main patterns of ridges: loops, whorls, and arches. Everyone's fingerprints are a combination of these patterns.

Today, you will have a go analysing your own fingerprints (and other household members if you like).



FINGERPRINT PATTERNS



loop



whorl



arch

SUPPLIES NEEDED

1. "Types of Fingerprints" Printable
2. [Index Cards](#) – at least two per participant
3. [Pencils](#)
4. [Pencil sharpener](#)
5. 3/4" [Transparent Tape](#) (A big [tape dispenser](#) works great for this!)
6. [Magnifying glasses](#) (The party favor kind works well.)
7. [Wipes](#)

Topic

Finger printing



Rub the lead pencil on an piece of card/paper to make your own "ink pad."

Once the ink pad has been created, gently rub your finger over the ink pad. You don't need to press down hard but you should move your finger around so that the lead gets on most of the fingertip.

Lay the tape on the table with the sticky side up.



Gently place your finger on the tape. Don't press down too hard or move your finger around a lot. You'll probably need to roll it from one side to the other but try not to move too much so your fingerprint won't be too smudged.

Lift your finger off of the tape, and place the tape on the blank card/paper. Repeat this for as many fingers as you want.



You now can compare your fingerprints and decide if you see whorls, arches, or loops.

Try dipping your fingers in baby/talcum powder and then place it on the sticky part of the cello tape. Roll it side to side. Can you make fingerprints this way as well?

