

Focus on Fingerprints

In the new book, *CLUB CSI: The Case of the Missing Moolah*, the seventh graders at Woodlands Junior High have been selling magazines to raise money for a class trip to Washington, D.C. Mrs. Ramirez has been keeping the money—\$1,500 in all—in a locked cash box in a locked drawer in her desk. But when Mrs. Ramirez went to count the money one last time, she found that \$100 was missing.

Ben, Corey, and Hannah, the members of CLUB CSI, discover some clues to solve this mystery, including fingerprints on Mrs. Ramirez' desk drawer and the cash box. But when they compare those prints to the fingerprints of all the possible suspects, will they really be able to figure out who took the money?

How does fingerprint analysis work?

Fingerprinting, one of the oldest crime-solving tools, is based on the fact that no two fingerprints are alike. When fingerprints are left on an object, they can be used to make a positive identification of the person who touched that object. *Latent fingerprints* are prints that are not immediately visible to the naked eye; CSIs use fingerprint dust and other techniques to

gather them. *Patent fingerprints* are easily seen, because a foreign substance such as dirt or paint makes them visible.

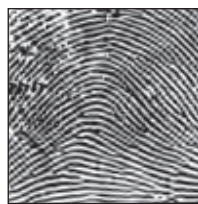
Fingerprints form one of three basic patterns:

Arch: Ridge lines flow across the finger and rise or wave in the center. This is the least common type of print.

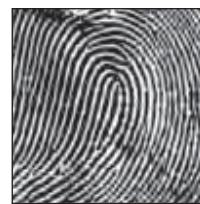
Loop: Ridges flow from one side of the finger, curve in the middle, and exit from the same side. The loop is the most common type of print.

Whorl: Ridges flow into a circular pattern.

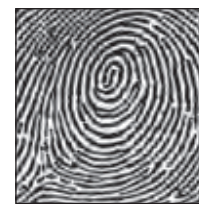
There also are variations within these basic patterns.



Arch



Loop



Whorl

Now, follow these directions to take a look at your fingerprints!

1. Rub the lead of a pencil on a piece of scratch paper until there is a dark, heavy smudge of graphite. This will be your fingerprinting pad.
2. Beginning with the little finger of your left hand, rub the smudge until the fingertip is covered with graphite. Place a small piece of clear tape over the smudged fingertip and press it down gently. Remove the tape and stick it in the space provided. Repeat the process for each finger of your left and right hands. Use extra paper if you need it.
3. Wash your hands to remove the graphite.
4. Compare each of your prints to the examples and determine whether it is an arch, loop, or whorl. Record your findings in the charts at right.

Left Hand

Thumb	Index	Middle	Ring	Pinky

Right Hand

Thumb	Index	Middle	Ring	Pinky

Patterns

	Thumb	Index	Middle	Ring	Pinky
Right Hand					
Left Hand					

To find out how the CLUB CSI: kids solved the crime, who did it, and why, read *CLUB CSI: The Case of the Missing Moolah!*

Learn more about fingerprints and how CSIs use them to help solve crimes with the CSI: Fingerprint Analysis Kit, available at Toys“R”Us®!

