

Fingerprint Basics

Fingerprint Principles

According to criminal investigators, fingerprints follow 3 fundamental principles:

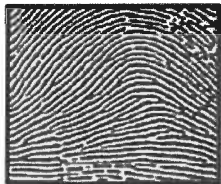
- ▶ A fingerprint is an **individual** characteristic; no two people have been found with the **exact** same fingerprint pattern.
- ▶ A fingerprint **pattern** will remain **unchanged** for the **life** of an individual; however, the print itself may change due to permanent scars and diseases.
- ▶ Fingerprints have general characteristic **ridge** patterns that allow them to be systematically identified.

Fingerprint Classes

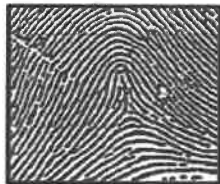
Fingerprints can be classified into three different groups based on the pattern of the ridges.

Arches

Ridges enter on one side & exit on the other side.



Plain Arch



Tented Arch

Loops

Ridges enter on one side & exit on the same side



L - Radial Loop
R - Ulnar Loop



L - Ulnar Loop
R - Radial Loop

Whorls

Consists of circles, more than one loop, or a mixture of pattern types

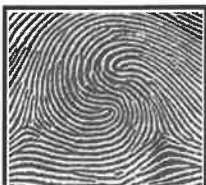
Plain Whorl



Central Pocket Whorl



Double Loop Whorl



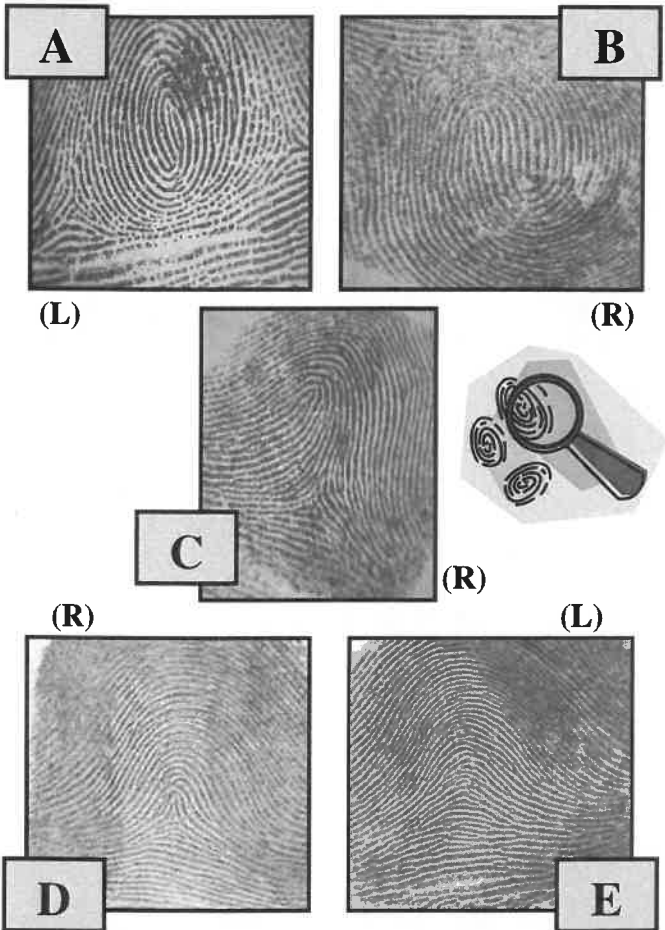
Accidental Whorl



Did you know?

Dactyloscopy is the study of fingerprint identification. Police investigators are experts in collecting “**dactylograms**”, otherwise known as fingerprints.

Can you identify each pattern?



Fingerprint Factoid

Approximately 60% of people have loops, 35% have whorls, and 5% have arches.

Fingerprint Exercise

Pinky

Ring

Middle

Index

Thumb

R

L

What types of patterns do you have?