

Fingerprints

Name: _____

1. Fingerprint Principles

According to criminal investigators, fingerprints follow 3 fundamental principles:

1. A fingerprint is an _____ characteristic; no two people have been found with the _____ same fingerprint pattern.
2. A fingerprint pattern will remain _____ for the _____ of an individual.
3. Fingerprints have general characteristic _____ patterns that allow them to be systematically identified.

2. Fingerprint Classes

There are 3 specific classes for all fingerprints based upon their visual _____: arches, loops, and whorls. Each group is divided into smaller groups as seen in the list below.

Plain
Tented

Radial
Ulnar

Plain
Central pocket
Double loop
Accidental

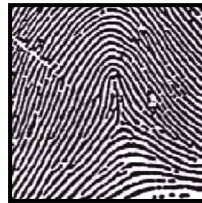
Loops = _____%
Whorls = _____%
Arches = _____%

3. Examples

Arches are the simplest type of fingerprints that are formed by ridges that enter on one _____ of the print and exit on the _____. No _____ are present.



_____ **Arch**
Ridges enter on one side and exit on the other side.



_____ **Arches**
Similar to the plain arch, but has a spike in the center.

Loops must have one _____ and one or more _____ that enter and leave on the same side. These patterns are named for their positions related to the _____ and _____ bones.

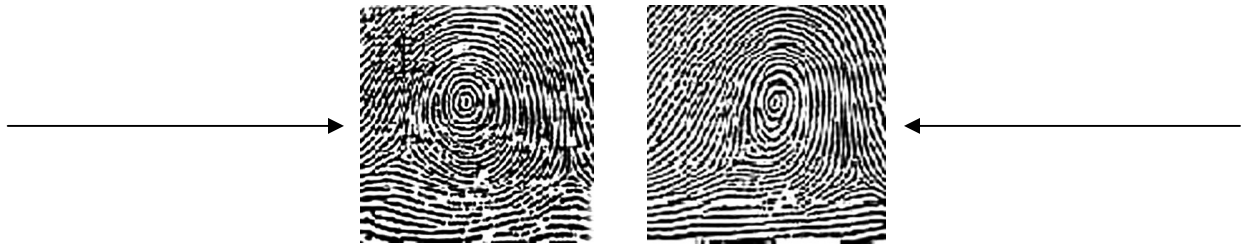
_____ **Loop**
Loop opens toward the thumb or radius bone on the right hand.



_____ **Loop**
Loop opens toward the little finger or the ulna bone on the right hand.

Whorls have at least one _____ that makes (or tends to make) a complete _____. They also have at least _____ deltas. If a print has more than two deltas, it is most likely an _____.

Draw a line between the two deltas in the plain and central pocket whorls shown below. If some of the curved ridges touch the line, it is a plain whorl. If none of the center core touches the line, it is a central pocket whorl. Label each fingerprint below.



_____ whorls are made up of any two loops combined into one print.



_____ whorls contain two or more patterns (not including the plain arch), or does not clearly fall under any of the other categories.

4. Identify each fingerprint pattern shown on the class notes.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____

5. Follow your teacher's directions to document your fingerprints on the My Prints worksheet. Use your notes and a magnifying glass to identify the pattern in each one.

