

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.

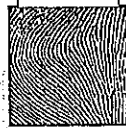
2. Fingerprint Classes

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	Radial	Plain	Loops = _____
Tented	Ulnar	Central pocket	Whorls = _____
		Double loop	Arches = _____
		Accidental	

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.

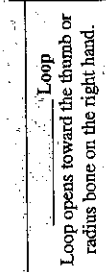


Radial Arch
Ridges enter on one side and exit on the other side.



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.

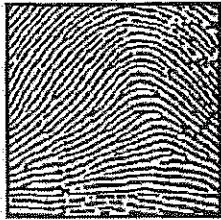
- A. _____ C. _____ D. _____ E. _____



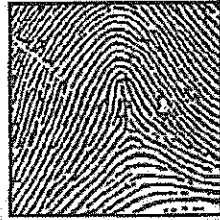
5. Follow your teacher's directions to document your fingerprints on the My Prints worksheet. Use your notes and a magnifying glass to identify the pattern in each one.

Fingerprint Ridge Patterns

Arches

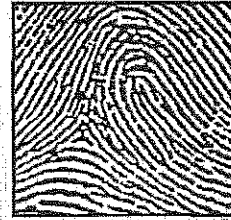


Plain Arch



Tented Arch

Loops



Radial Arch



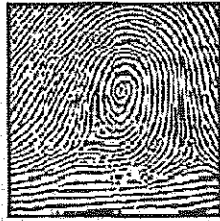
Ulnar Arch

Right Hand

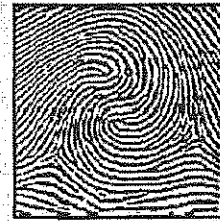
Whorls



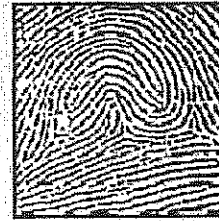
Plain Whorl



Central Pocket Whorl

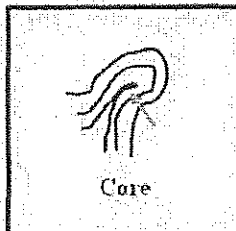


Double Loop

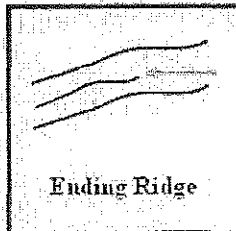


Accidental

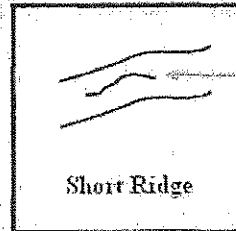
Fingerprint Ridge Characteristics



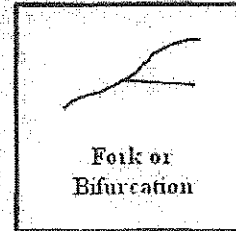
Core



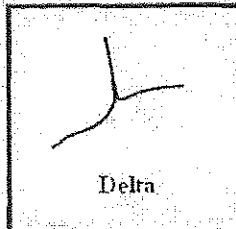
Ending Ridge



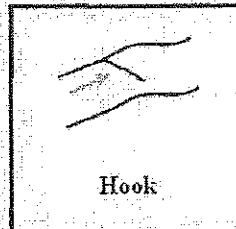
Short Ridge



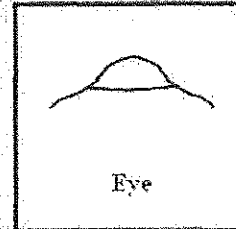
Fork or Bifurcation



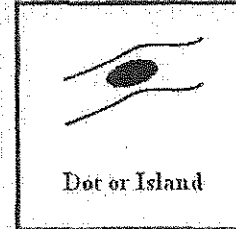
Delta



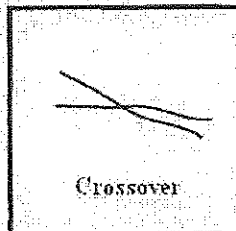
Hook



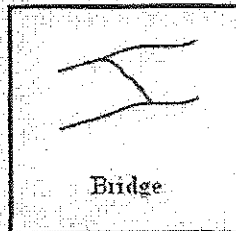
Eye



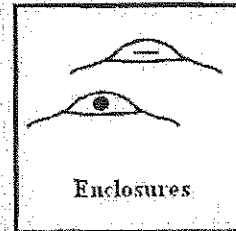
Dot or Island



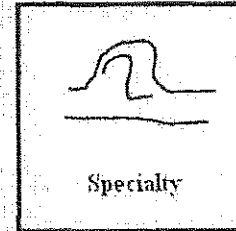
Crossover



Bridge



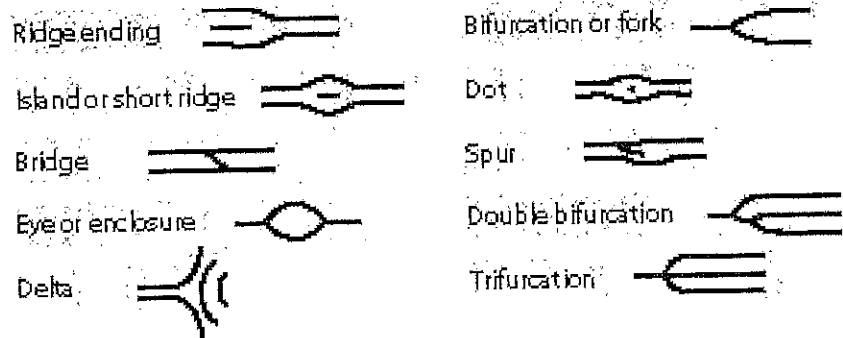
Enclosures



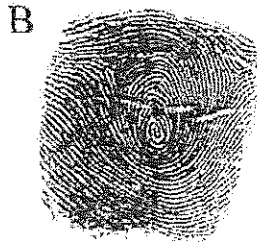
Specialty

Name: _____ Date: _____

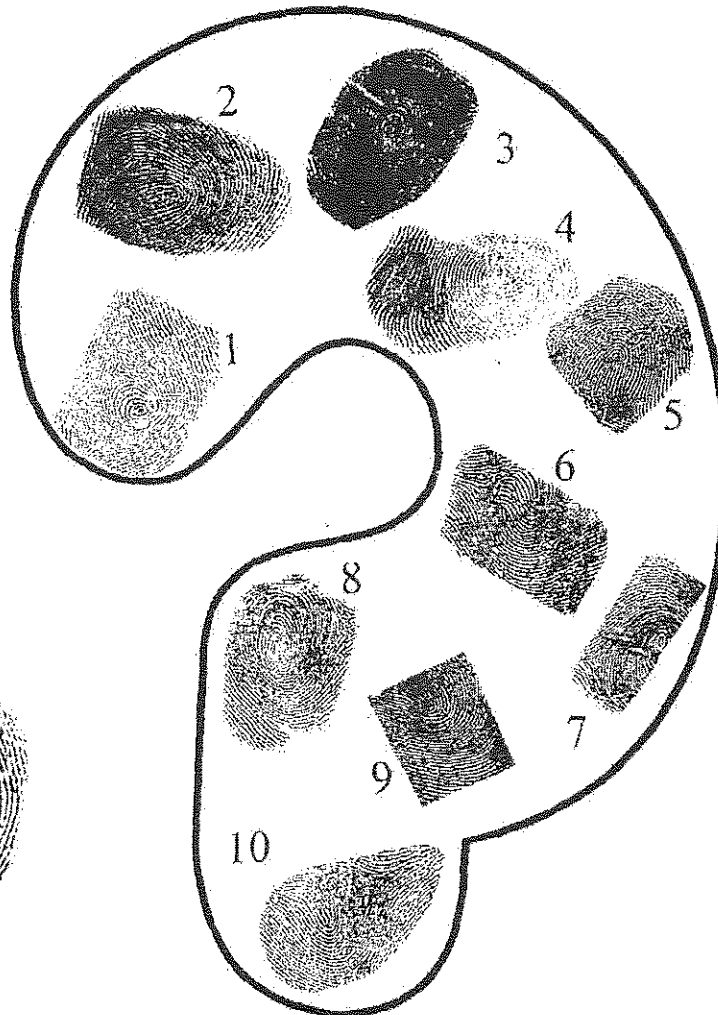
Fingerprint Minutiae



© Fingerprint Challenge



Match the prints inside the question mark to the prints found around the border of the page.

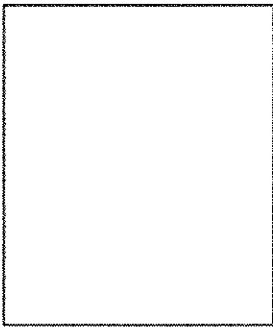


Fingerprint Data:

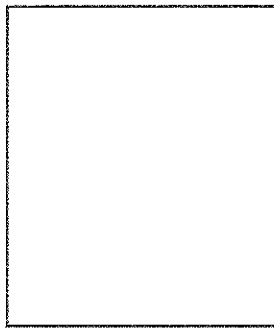
Name: _____

Part1: My Fingerprints.

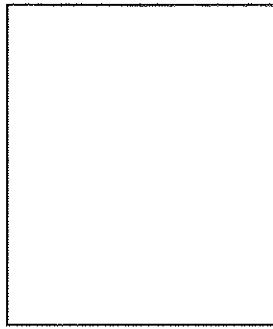
- Follow your teacher's instruction to sample your fingerprints.



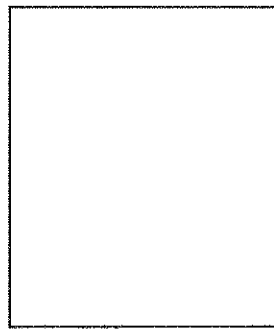
Left Pinky



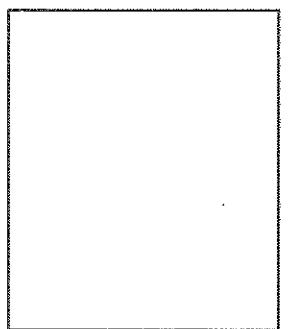
Left Ring



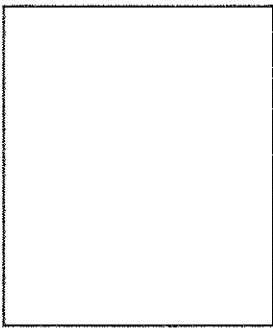
Left Middle



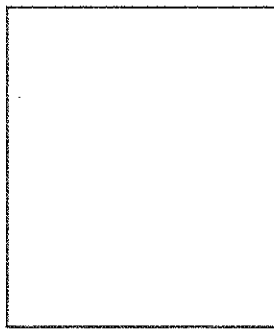
Left Pointer



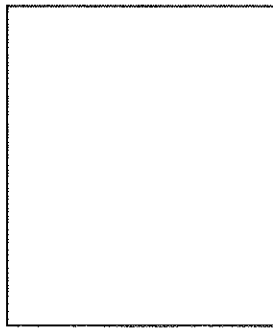
Left Thumb



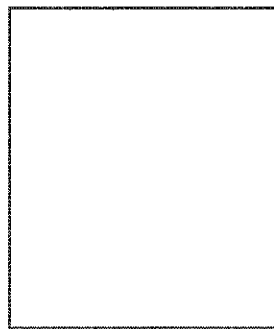
Right Pinky



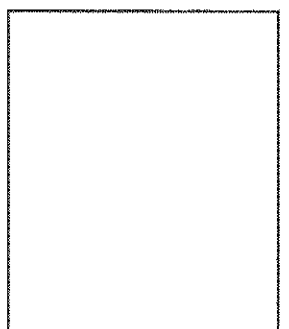
Right Ring



Right Middle



Right Pointer



Right Thumb

Record Your Data Below: (Loop, Whorl, Arch)

	Thumb	Index	Middle	Ring	Pinky
Left Hand					
Right Hand					

Using the data from both your hands, count the total number of loops, whorls, and arches.

Total # Loops: _____

Total # Whorls: _____

Total # Arches: _____