Unit 4: Fingerprints (part 2)

II. Classification of fingerprints:

A. Three basic patterns—_____,_____, _____

1. Loop

- = one or more ridges entering from one side, curving, then going out from same side entered
- contains a _____
- _____of all fingerprints have loops
- Subcategories of loop
  - _____ = opens toward the thumb, which is toward the radius
  - _____ = opens toward the little finger, which is toward the ulna
    - (NOTE: need to know which hand print came from to determine radial or ulnar loop . . . ulnar loops are more common)
- Sketch Radial and Ulnar Loop below with hands

2. Whorls

- = contains at least _____
- _____ of fingerprints are plain whorls, _____ are composite or accidental whorls
- Subcategories of whorl
  - _____, _____, _____, _____
- Whorls have at least _____ ridge that makes (or tends to make) a complete circuit. 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. If _____ of the curved ridges touch the line, it is a plain whorl. If _____ of the center core touches the line, it is a central pocket whorl.

3. Arches

- = all _____ enter on one side and exit on the other; contain _____ delta or core, least common
  - Subcategories of arch _____, _____

B. Ridge classification (Individualization)

1. Minutiae = _____ __ of ridgecharacteristics include (make sure to sketch each next to them).

   _____ _____ _____

C. AFIS and IAFIS- The computer database uses _____ to compare fingerprints and determine a match.

D. Quick Tips- If a fingerprint has no deltas, it is an _____, If a fingerprint has one delta, it is a _____ If a fingerprint has two or more deltas, it is a _____.