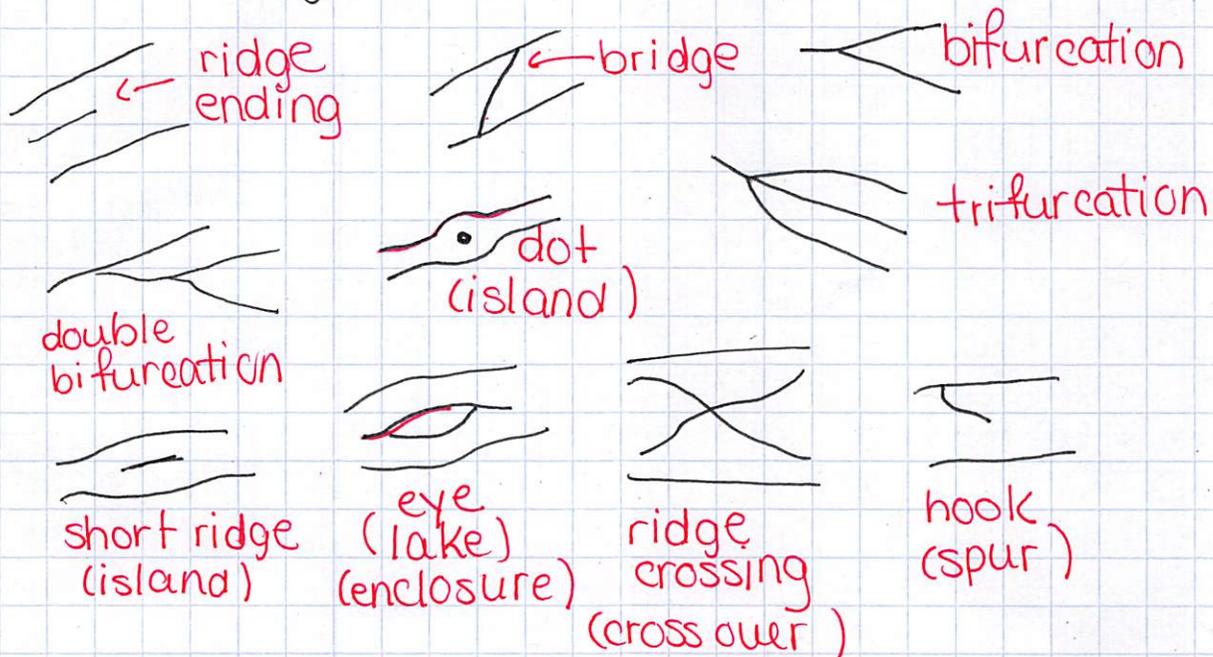


## D. Identifying Fingerprints

### 1. Ridge Characteristics (Minutiae)



core - center of the fingerprint

ridge count = # ridges b/w the core & a delta

### E. Types of Prints (3)

- (1) visible (patent) prints - visible prints in substances such as blood, paint, ink, etc.
- (2) plastic prints - prints pressed into soft materials, like clay or mud.
- (3) latent (hidden) prints - print made by deposits of oil or perspiration onto a surface & are invisible to the naked eye.

F. Lifting Latent Prints - powders adhere to the oils in the print, making them visible

- (1) black - carbon - used on white/light surfaces
- (2) gray - aluminum - used on dark surfaces, mirrors
- (3) fluorescent - fluoresce/glow under UV lights
- (4) magnetic - no bristles to damage print, used on finished leather or rough plastics

F

(5) Superglue Fuming (cyanoacrylate) - used for soft or porous surfaces like paper, cardboard, cloth, or metals

(6) Iodine Fuming - oldest method, iodine solid <sup>not permanent</sup> sublimates (turns from a solid to a gas), reacting w/ oils in the print & turning it brown

(7) Ninhydrin - chemical developer; spray the print & then add heat & turns the print purple

(8) RUVIS - reflected ultraviolet imaging system  
- uses lasers or LEDs w/ filters

(9) Other

- dyes

- DFU - fluoresces print in blue-green light

- Amida black - used to find prints on skin