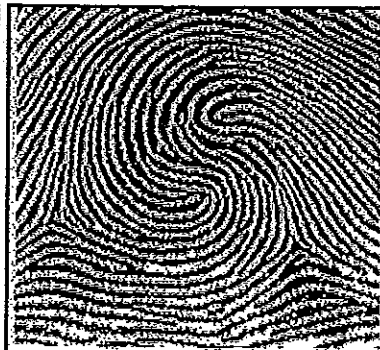


Federal Bureau of Investigation Educational Internet Publication

# Fingerprint Identification



CENTRAL POCKET LOOP



DOUBLE LOOP



ACCIDENTAL



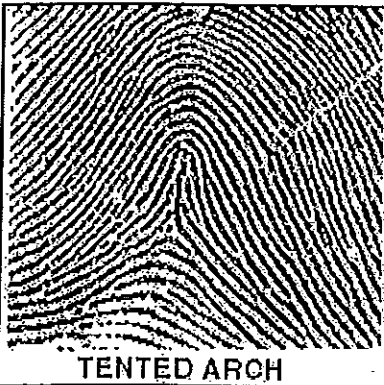
PLAIN ARCH



PLAIN WHORL



LOOP



TENTED ARCH

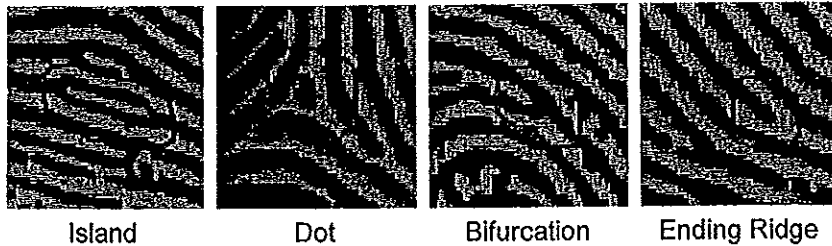
E-Learning Zone | Crimebusters Index | FBI Fingerprinting

All material © 105 The Cornwallis School, Maidstone, Kent, UK. All Rights Reserved

**Fingerprints – Minutiae Features**

(taken from <http://www.policensw.com/info/fingerprints/finger08.html>)

Identification by fingerprints relies on pattern matching followed by the detection of certain ridge characteristics, also so known as Galton details, points of identity, or minutiae, and the comparison of the relative positions of these minutiae points with a reference print, usually an inked impression of a suspect's print. There are three basic ridge characteristics, the ridge ending, the bifurcation and the dot (or island).



Identification points consist of bifurcations, ending ridges, dots, ridges and islands. A single rolled fingerprint may have as many as 100 or more identification points that can be used for identification purposes. There is no exact size requirement as the number of points found on a fingerprint impression depend on the location of the print. As an example the area immediately surrounding a delta will probably contain more points per square millimetre than the area near the tip of the finger which tends to not have that many points.

**Basic and composite ridge characteristics (minutiae)**

Minutiae	Example	Minutiae	Example
ridge ending		bridge	
bifurcation		double bifurcation	
dot / delta		trifurcation	
short ridge		opposed bifurcations	
island (enclosure)		ridge crossing	
hook (spur)		opposed bifurcation/ridge ending	

**Additional Assistance**

<http://shs.westport.k12.ct.us/forensics/04-fingerprints/handout.htm>

<http://en.wikipedia.org/wiki/Fingerprint> - just for additional information, some pictures, and links to continue your research on