Notes Part 2

/ Fringerprints

The Science of Ridges

Th	e Science of Ri	dges	Name						
	tification.	the study of the uniquene	ss	of friction ridge structur	res ai	nd their	use	for	personal
2. A	s we have learned in our fi	irst lesson, a fingerprint is ma	ade	e of a series of		and _			
on t	he surface of the finger. The	he uniqueness of a fingerprin	ıt c	can be determined by the _				of ri	dges and
valle	eys as well as the	points, which are	po	ints where the ridge structu	re cha	nges.			
3. V	When minutiae on two di	fferent prints match, these a	are	called points of				or	points of
		t this point there is i							
		two fingerprints. However,				_			
poir	ts while Australia requires								
1 4	EIC -								
4. A	.F15 =		_						
5. R	idge Characteristics - Dra	aw the different ridge characte	eris	stics listed below.					
г			ı		_				
	Core	Ending Ridge		Short Ridge			ork o crcat		
Ī			 		F				\dashv
				stanta in the stantage of the					
				,					
	Delta	Dot or Island		Eye		Ŧ	łook		
			1 1						=
-									
	Crossover	Bridge		Enclosures		Sp	ecial	tv	

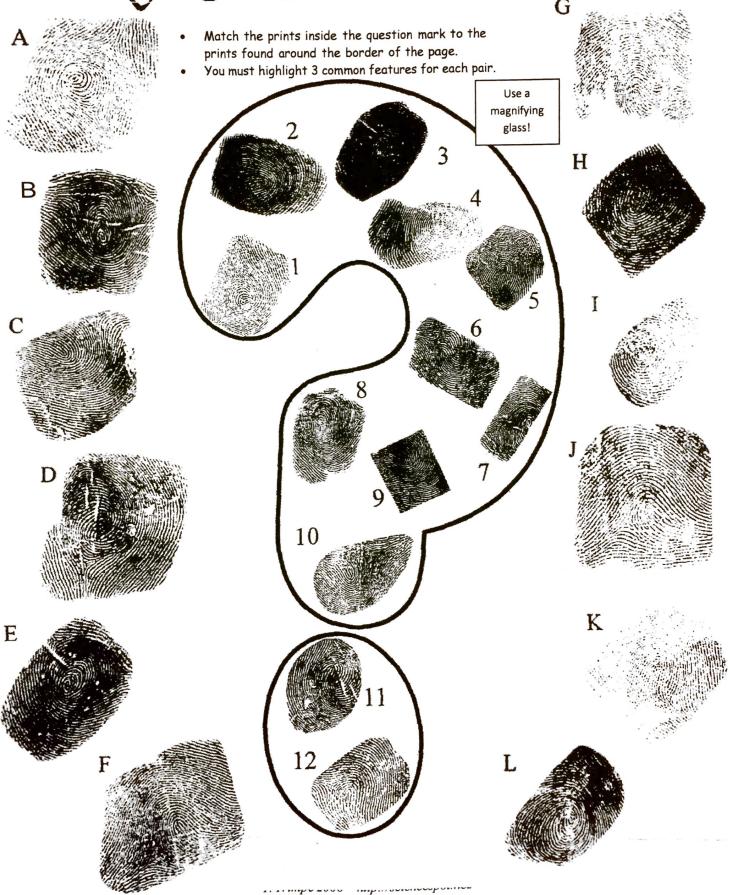
6. How many ridge characteristics can you identify in this fingerprint? Use a hand lens and highlighter to help you identify the characteristics and then label each one.



Try It! - Analyze the fingerprints on your "My Prints" worksheet to see how many ridge characteristics you can find.

Which ridge characteristics did you find in your fingerprints? List them below and mark the two most common ones with a star.

Offingerprint Challenge 1



Fingerprint Challenge #2

See if you can identify each minutia point in this fingerprint found at a crime scene. When you are done check your answers at the front of the room.

Fingerprint Minutiae



Fingerprint Challenge #3

Matching Fingerprints: When you are done check your answers at the front of the room.

From the 20 impressions below, match the ones that are made by the same finger. In some cases, one print may appear two or three times. Some will not match. Write your answers in your notebook or in the space below each fingerprint.



HINT: There is 1 triple print, 6 doubles & 5 with no match at all

DEAD RECKONING: FINGERING THE KILLER

1. What crime is being investigated on this episode of Dead Reckoning and what is the time period of the investigation? Why was the crime committed?

2. What evidence is harvested by the investigative team to figure out whom, how and why the murder occurred? Be specific.

1. 7.

2. 8.

3. 9.

4. 10.

5. 11.

6. 12.

3. How did the investigators analyze the evidence? What methods, tools or equipment did they use?

Discussion

- 4. What did you think about the work done by the investigators and lab technicians over the 25+ years? How many hours do you think were spent in solving this crime?
- 5. What were the changes that occurred in evidence analysis over that period?
- 6. What do think are the 2 strongest pieces of evidence that could be used when convicting a suspect of a specific crime?