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Specialization: Dactyloscopy Name: ______ Rating: _____

Personal Identification:

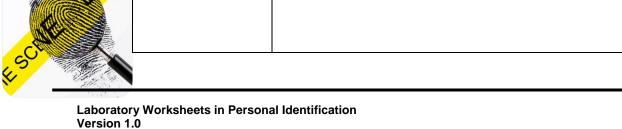
Tracing Back the Beginning and its Development as a Science

Objective: To explore the beginning and development of various sciences associated with personal identification.

Key words: Anthropometry, Dactyloscopy, Chiroscopy, Poroscopy, Podoscopy, Odontology, Cheiloscopy, DNA Fingerprinting

Activity 1 Create a timeline showing the development of the science of personal identification.

TIME EVENT	





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Activity 2	Frequently Asked Questions (FAQ)

1.	What are the three-fold principles involved in the study of fingerprints?
2.	Who is the Father of Dactyloscopy?
3.	Who is the Father of Fingerprint Science?
4.	What is AFIS?
5.	What is CODIS?
Activi	ity 3 Define or describe the following keywords.
1.	Anthropometry
2.	Dactyloscopy
3.	Chiroscopy
4.	Roroscopy
	Podoscopy



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6.	Odontology
7.	Cheiloscopy
8.	DNA Fingerprinting

Cite all the references you used in completing the exercise (Books, e-books, websites etc.).





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Friction Ridge

Objective: To discover different layers of human skin associated with friction ridges and how fingerprints are formed.

Key words: Skin furrows, Dermal papillae, Papillary ridges, Malphigian layer, Dermis, Epidermis, Eccrine glands, Sebacious glands, Apocrine glands.

Activity 1	Activity 1 Draw the anatomy of the skin (Hairless part)					
NOT NOT						





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Activity 2 Frequently Asked Questions (FAQ)

1. What secretions are present in the following skin glands?

	Inorganics	Organics
Eccrine		
Sebaceous		
Apocrine		

2. What is Latent Fingerprint?

3. What skin layer is named after Marcelo Malpighi?





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Activity 3 Define or describe the following keywords.

- 1. Skin furrows
- 2. Dermal papillae
- 3. Papillary ridges
- 4. Malphigian layer
- 5. Dermis
- 6. Epidermis
- 7. Eccrine glands
- 8. Sebacious glands
- 9. Apocrine glands.





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Galton Details

Objective: To be acquainted with the different ridge characteristics and formations of the finger.

Key words: Minutiae, Type line, Focal Points, Bifurcation, Spur, Incipient Ridge, Dissociated Ridge, Appendage

Activity 1 Give the name of the following Minutiae/Galton Details. Draw the minutiae identified in the vacant boxes.

W	£	≥	(3)
≋	9	≈	*
Z	=	Z	Ж
Divergence	Convergence	Incipient (Nascent)	Dissociated
Delta	Core	Type line	Appendage



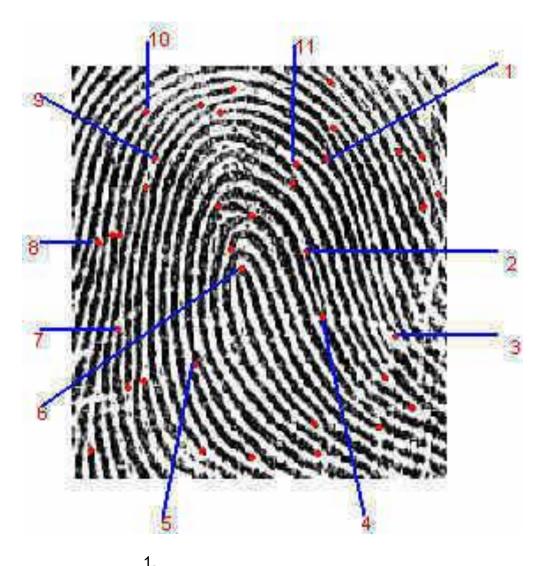
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Activity 2 Name the corresponding detail of the given fingerprint pattern.



2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.	 	
40	 	



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Activity 2 Frequently Asked Questions (FAQ)

- 1. What is the relevance of ridge characteristics in personal identification?
- 2. What is the standard of the following countries when it comes to the consideration of analogous points in two fingerprints to arrive at a positive identification?

Country	Matching Points
Philippines	
Japan	
Spain	
Switzerland	
Austria	
England	
France	
Germany	

3. What is the standard of the International Association of Identification as to the number of homogeneous points in two fingerprints to arrive at a positive identification?





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Activity 3 Define or describe the following keywords.

- 1. Minutiae
- 2. Type line
- 3. Focal Points
- 4. Bifurcation
- 5. Spur
- 6. Incipient Ridge
- 7. Dissociated Ridge
- 8. Appendage





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Fingerprint Patterns

Objective: To familiarize the three (3) major fingerprint patterns and its requisites as well as the eight sub-patterns of fingerprints.

Key words: Radial loop, Ulnar loop, Plain Arch, Tented arch, Plain whorl, Double loop whorl, Central Pocket loop whorl, and Accidental whorl.

Activity 1 Draw the pattern asked in the following boxes.

Plain Arch	Tented Arch	Radial Loop	Ulnar Loop
Plain Whorl	Double Loop Whorl	Central Pocket Loop Whorl	Accidental Whorl



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Activity 2 Frequently Asked Questions (FAQ)

1.	What is the frequency distribution of the three major divisions of fingerprint patterns?
	(present it in a pie diagram)

2. What is the frequency distribution of the sub-groups of fingerprint patterns? (provide a pie diagram for each group)

Arch Group

Loop Patterns

Whorl Patterns





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Define or describe the following keywords. **Activity 3**

- 1. Radial loop
- 2. Ulnar loop
- 3. Plain Arch
- 4. Tented arch
- 5. Plain whorl
- 6. Double loop whorl
- 7. Central Pocket loop whorl
- 8. Accidental whorl





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Fingerprint Classification

Objective: To apply the rules in deriving the fingerprint classification of a given set of fingerprint patterns.

A. Prim	ary Cla	assific	cation
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Key words	: Primary Classification, Blocking, Pairing, Numerator and Denominator				
Activity 1	Enumerate the steps in deriving the primary classification				

Activity 2 Frequently Asked Questions (FAQ)

- 1. What is the primary classification of a set of fingerprint pattern if all are identified to be coming from the whorl family?
- 2. What is the lowest possible primary classification in a fingerprint record?





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Activity 3 Define or describe the following keywords.

- 1. Primary Classification
- 2. Blocking
- 3. Pairing
- 4. Numerator
- 5. Denominator

Activity 4 Figure out the primary classification of the following problems.

X	1	С	Т	W
ZO U	D	X	1	A



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Name: _____ Rating: _____

2	Answer:	
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1	С	A	A	1
\	D	X	1	\

X	Amp	С	Т	W
\	О	X	МВ	A





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B. Secondary Classification

Keywords:	Secondary classification, Capital letter group, Small letter group, ART, dash
Activity 1	Enumerate the rules observed in deriving the secondary classification.

Activity 2 Frequently Asked Questions (FAQ)

1. What set of fingers are involved in deriving the secondary classification?

2. What are the symbols to be used in representing the fingers for the capital letter group?





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Activity 3 Define or describe the following keywords.

- 1. Secondary classification
- 2. Capital letter group
- 3. Small letter group
- 4. ART
- 5. Dash

Activity 4 Figure out the secondary classification of the following problems.

X	/	С	Т	W
U	D	X	1	A





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Rating:	

2. /	Answer:
------	---------

1	С	A	A	1
\	D	X	/	\

X	Amp	С	Т	W
\	D	X	MB	A







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C. Sub-secondary Classification

Keywords:	Sub-secondary classification, Ridge Counting and Ridge Tracing			
Activity 1	Enumerate the rules observed in deriving the sub-secondary classification.			
Activity 2	Frequently Asked Questions (FAQ)			
1. What	set of fingers are involved in deriving the sub-secondary classification?			
2. What	are the rules in ridge counting?			
<u> </u>				



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/hat are the rules in Ridge tracing?				

Activity 3 Define or describe the following keywords.

- 1. Sub-secondary classification
- 2. Ridge Counting
- 3. Ridge Tracing





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Activity 4 Figure out the sub-secondary classification of the following problems.

1. Answer: _____

X	/ 15 ridge counts	C 4 tracings Above right delta	Т	W
U	\ 9 ridge counts	X 2 tracings	/ 8 ridge counts	A

2. Answer: _____

1	C 4 tracings Below right delta	/ 11 ridge counts	A	1
\	D	W 1 tracing	/ 10 ridge counts	1

X	Amp	C 3 tracings In front right delta	Т	W
D 5 tracings aboright delta		X 2 tracings	MB	A



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D. Major Classification

Keywords: Major classification, IMO, SML				
Activity 1	Enumerate the rules observed in deriving the major classification.			

Activity 2 Frequently Asked Questions (FAQ)

- 1. What set of fingers are involved in deriving the major classification?
- 2. What are the two tables used in deriving the major classification?

	Table A	Scale	Table B	Scale
-				
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Activity 3 Define or describe the following keywords.

- 1. Major classification
- 2. IMO Classification
- 3. SML Classification
- **Activity 4** Figure out the major classification of the following problems.
 - 1. Answer on the box

18 RC	
16 RC	

2. Answer on the box

15 RC	
19 RC	





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3. Answer on the box

C 4 tracings Below right delta	
16 RC	

4. Answer on the box

W 2 tracings	
19 RC	





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Keywords:	Final classification, Ridge Counting of Whorls	
Activity 1	State the rules observed in deriving the final classification.	
· 		

Activity 2 Frequently Asked Questions (FAQ)

- 1. What finger or set of fingers are involved in deriving the final classification?
- 2. What process is done if both little fingers come from the whorl family?
- 3. Where is the derived final classification exhibited in the classification line/formula?





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Activity 3 Define or describe the following keywords.

- 1. Final classification
- 2. Ridge Counting of Whorls
- **Activity 4** Figure out the final classification of the following problems.
 - 1. Answer in the box

15 RC of \	
16 RC of /	

2. Answer in the box

5 RC of whorl	
19 RC of loop	





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Rating: _

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-3	Answer	ın	tha	hav
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Т	
A	

4. Answer in the box

Α	
11 RC of W	



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F. Key Classification

Keywords:	ds: Key classification, First Loop pattern, First whorl pattern		
Activity 1	State the rules observed in deriving the key classification.		

Activity 2 Frequently Asked Questions (FAQ)

- 1. What finger or fingerprint patterns are considered in deriving the key classification?
- 2. What process is done in deriving the key classification?
- 3. Where is the derived key classification exhibited in the classification line/formula?





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Activity 3 Define or describe the following keywords.

- 1. Key classification
- 2. First Loop pattern
- 3. First whorl pattern

Activity 4 Figure out the key classification of the following problems.

X	/ 15 ridge counts	C 4 tracings Above right delta	Т	W
U	\ 9 ridge counts	X 2 tracings	/ 8 ridge counts	A





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Name: ______

2. Answer: _____

/ 13 ridge counts	C 4 tracings Below right delta	/ 11 ridge counts	A	1
\	D 2 tracings	W 1 tracing	/ 10 ridge counts	\

3. Answer: _____

X	Amp	C 3 tracings In front right delta	Т	W
\ 10 ridge counts	D 5 tracings above right delta	X 2 tracings	MB	A

W 13 ridge counts	C 4 tracings Below right delta	D 11 ridge counts	Α	/ 14 ridge counts
ZIO ^X	D	W 1 tracing	W 10 ridge counts	\



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G. Second Sub-secondary Classification

Keywords:	Second sub-classification, All loop pattern		
Activity 1	State the rules observed in deriving the sub-secondary classification.		

Activity 2 Frequently Asked Questions (FAQ)

- 1. What fingers or fingerprint patterns are considered in deriving the second sub-secondary classification?
- 2. What process is done in deriving the key classification?
- 3. Where is the derived sub-secondary classification exhibited in the classification line/formula?





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Activity 3 Define or describe the following keywords.

- 1. Second sub-secondary classification
- 2. First Loop pattern
- **Activity 4** Figure out the key classification of the following problems.
 - 1. Answer: _____

/	/	/	/	/
10 ridge counts	5 ridge counts	9 ridge counts	10 ridge counts	15 ridge counts
/	\	/	/	/
18 ridge counts	9 ridge counts	5 ridge counts	8 ridge counts	15 ridge counts

/	\	/	\	\
13 ridge counts	9 ridge counts	11 ridge counts	9 ridge counts	9 ridge counts
andge counts	\	\	/	\
	4 ridge counts	7 ridge counts	11 ridge counts	8 ridge counts



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Fingerprint Impression Development

Objective: To demonstrate the competencies and skills in development of different fingerprint impressions.

Key words: Fingerprint, Latent print, Patent print, Plastic print, Mechanical Method and Chemical Method

Activity 1 Create a Quick Guide in Latent Print Development with the consideration of different surface characteristics.

Surface	Method
<u> </u>	
/	

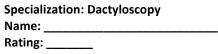


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Activity 2 Frequently Asked Questions (FAQ)

1. What are the three kinds of Fingerprint impressions?

2. How are fingerprint impressions formed?

Activity 3 Define or describe the following keywords.

- 1. Fingerprint
- 2. Latent print
- 3. Patent print
- 4. Plastic print
- 5. Mechanical Method
- 6. Chemical Method





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Mechanical and chemical Development **Activity 4**

Instructions:

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- 1. Collect the following materials for the actual development and lifting of fingerprint impressions: soda cans, dvd-disc/cd disc, monoblock chair, bond paper, coffee mug, knife, unfinished wood, plastic packaging material, adhesive-coated material and pvc pipe.
- 2. Put on your fingerprint impressions on the above mentioned materials. Vary the conditions of transferring your prints such as clean or dirty hands.
- 3. Review the quick guide you have created and start developing the impressions and subsequently lift the same and preserve.
- 4. Follow the standard procedure in the preservation of fingerprint evidence and accomplish the evidence tag for proper labeling. See illustration below:



