

# Fingerprinting Guide Creating Known Standards

Brought to you by the National Institute of Justice's Forensic Technology Center of Excellence (FTCOE)

#### Background

A known fingerprint standard is the purposeful recording of an individual's fingerprints. A trained forensic professional can use a known fingerprint standard for comparison with a questioned latent print obtained from a crime scene to render a conclusion about its source. In this activity, known fingerprint standards will be recorded onto a fingerprint card using black ink.

#### **Supplies:**

- Paper to protect the surface being used from ink
- Black stamp pad or fingerprinting ink
- Blank FTCOE fingerprint card (included on the following page)
- Alcohol wipes or baby wipes
- Magnifying glass

#### Aims & Objectives:

- Part 1: Using black ink, record each individual fingerprint in the correct spot in the template.
- Part 2: Record the index, middle, ring, and little fingers of each hand simultaneously.
- Complete the Supplemental Questions on page 4.

#### **Helpful Hints**

- Practice inking and rolling the fingers using the following instructions onto a separate sheet of paper first. If ridges aren't defined, try using less pressure or less ink and record again.
- Use alcohol/baby wipes to clean fingers after the activity is finished.



Forensic Technology



# Fingerprint Card Template

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FIRST NAME		MIDDLE INITIAL		LAST NAME	
1. RIGHT THUMB	2. RIGHT INDEX	3. RIGHT MIDDLE		4. RIGHT RING	5. RIGHT LITTLE
6. LEFT THUMB	7. LEFT INDEX	8. LEFT MIDDLE		9. LEFT RING	10. LEFT LITTLE
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LEFT FOUR FINGERS TAKEN SIMULTANEOUSLY		LEFT THUMB	RIGHT THUMB	RIGHT FOUR FINGERS T	AKEN SIMULTANEOUSLY

#### For more information, visit ForensicCOE.org or email us a ForensicCOE@rti.org.

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# Step-by-Step Instructions

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## Part 1: Individual Prints

- Select the finger that will be recorded. Using light pressure and one smooth motion, roll the full fingertip (all skin above the first joint crease) into the stamp pad. Ensure the full fingertip, including all skin from one edge of the nail to the other edge, is inked.
- Use light pressure and a smooth continuous motion to roll the inked finger, from one side of the nail to the other, into the box that corresponds to the finger being recorded.
- 3. Repeat Steps 1 and 2 until all fingertips are recorded into the individual boxes (see Fig. 1).

## **Part 2: Simultaneous Prints**

1. RIGHT THUMB	2. RIGHT INDEX	3. RIGHT MIDDLE	4. RIGHT RING	5. RIGHT LITTLE
6. LEFT THUMB	7. LEFT INDEX	8. LEFT MIDDLE	9. LEFT RING	10. LEFT LITTLE

Figure 1: Snapshot of the relevant portion of the template fingerprint card to use in this section.

- 1. Deposit the index, middle, ring, and little fingers of one hand onto the ink pad at the same time (simultaneously) using light pressure. Do not roll. Portions of the fingers beneath the first joint creases will also be inked.
- 2. Place the inked fingers, at the same time, into the appropriate box on the worksheet. Do not roll (see Fig. 2).
- 3. Deposit the thumb of the same hand, using light pressure, onto the ink pad. Do not roll.
- 4. Place the inked thumb into the appropriate box on the worksheet. Do not roll.
- 5. Repeat Steps 1 through 4 for the other hand.

LEFT FOUR FINGERS TAKEN SIMULTANEOUSLY	LEFT THUMB	RIGHT THUMB	RIGHT FOUR FINGERS TAKEN SIMULTANEOUSLY

Figure 2: Snapshot of the relevant portion of the template fingerprint card to use in this section.

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# Fingerprint Pattern Types

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There are three major pattern types: loops, whorls, and arches. Each finger has one pattern type and individuals may have a mixture of pattern types.

## **Examples of Pattern Types**



Left Loop





**Arches** 

#### Plain Arch Tented Arch

#### Whorls\*





Plain Whorl Double Loop Central Pocket Whorl Loop Whorl \*Not Pictured: Accidental Whorl

#### **Examples of Minutiae**



**Right Loop** 



**Ending Ridge** 





Short Ridge

Dot

#### **Supplementary Questions**

- 1. What fingerprint patterns are on your fingers?
- 2. Do you have scars or warts on your fingers? Can you see them in your recorded fingerprints?
- 3. Can you find each minutiae type in your prints?

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