

The Fingerprint Collection and Analysis event tests competitors' skills in locating and lifting fingerprints. Participants will then engage in comparative analysis to match the lifted print to known samples.

Entry Requirements

- Competitors in this event compete individually, not as a team.
- Chapters can only register 3 individuals to compete.

Materials

Competitors can/should provide the following materials. Competitors are only permitted to bring in the below materials to the competition. TPSA does not provide the below materials.

Competitor Provided Materials

- **Photo Identification:** Reference the rulebook (<https://tpsa.info/rulebook>) for details.
- **Pen:** Blue or Black Ink
- **Black fingerprint powder:** (non-magnetic)
- **Fingerprint brush**
- **Fingerprint lifting tape:** (clear or frosted), no precut tape strips, no hinged or gel lifters (fingerprint backing cards will be provided at competition site)
- **Scissors**
- **Gloves**
- **Workstation cleaning wipes.**
- **Sheet Legal Size White Copy Paper:** (optional)
- **Absorbent pads:** (optional)
- **Magnifying loupe/ magnifying glass:** (optional)
- **Ridge counter :** (optional)
- **Coffee Filter:** (optional)
- **Air bubble remover:** (optional)
- **Flashlight:** (optional)

Supplemental Documents

- [Fingerprint Stage 2 Answer Document](#)

Procedures and Timeline

- **Check In (10 min Time Limit):** Competitors must check in to their event at their designated **check-in time** . Competitors that arrive **ten (10) minutes** after their designated check-in time will be marked as no-shows and not be allowed to compete out of respect for the time commitment made by our Judges and Volunteers.
- **Pre-Event Briefing (5 min Time Limit):** After check-in, Competitors will be guided to the designated event area. Once there, the Moderator will provide a comprehensive briefing, detailing the event's instructions, rules, and procedures. This briefing ensures that each Competitor is well-informed and prepared for the subsequent stages of the competition.
- **Moderator Instructions (2 min Time Limit)**
 - Each student will be directed (by room moderator) to a workstation with two items of evidence (example; glass, ceramic tile, kitchen knife, etc.). The moderator will then identify the designated submission area.
 - The competitor will place all required items on their workstation, visible to the room moderator before time starts. Competitors may choose to wear gloves to remove required items, these gloves must be removed prior to the start of phase 1. Competitors who fail to bring the appropriate supplies should anticipate receiving zero points for criteria requiring these materials. No supplies shall be shared between competitors. Moderator will ensure all competitors have removed their optional gloves prior to start of phase 1.
- **Part 1 (5 min Time Limit):** The room moderator will set a timer for 5 minutes. When the moderator starts the timer and calls "start",

each competitor will:

1. Don gloves.
 2. Locate, dust, and lift a print from the surface of the item. The competitor may lift from one or both of the items. No extra time will be added for the second item.
 3. Adhere the lifted fingerprint to a backing card and completely fill out the card. (Cards shall be provided by TPSA, Case information shall be provided by TPSA on each workstation)
 4. Place one completed fingerprint card in the designated submission area before time is called. If the competitor has opted to lift two prints, the competitor must choose which print they will submit. Only one card shall be submitted to the judge for scoring. The second card shall be deposited in the trash prior to the student cleaning up their workstation. The judge/ monitor may not speak to the student regarding which card to submit.
 4. Clean up workstation.
 5. The moderator will call "time" when the 5 minute timer sounds. All competitors must place their hands in the air and back away from their workstations.
- **Reset (5 min Time Limit):** The judge will check each workstation for cleanliness. Competitors who have not cleaned their stations will receive a deduction in points on the scoring rubric and be asked to reclean their workstation.
 - **Moderator Instructions (Phase II) (5 min Time Limit)**
 1. The room moderator will distribute a photocopied fingerprint analysis packet to each competitor (face down on the desk).
 - Each packet will contain:
 - 3x Ten-Print Identification Cards containing "known" prints;
 - 1x suspect print of unknown origin located on the answer document.
 - 2. The moderator will set a timer for 30 minutes.
 - **Part 2 (20 min Time Limit)**
 1. The moderator will start the time and announce "start"
 2. Upon the word "start" each competitor shall: Turn over their fingerprint analysis packet (staple may be removed), analyze the prints and attempt to make a match between the suspect print and the fingerprint cards, and once the competitor has a "match" they will complete the identification process by;
 3. Circling five minutiae on the "suspect" print and the corresponding minutiae on the "known" print. Each minutiae shall be assigned a number 1-5 by the competitor.
 4. The competitor will name the specific overall fingerprint pattern (tented arch, plain arch, radial loop, ulnar loop, plain whorl, central pocket loop whorl, double loop whorl, accidental whorl) on the answer document.
 5. If the competitor completes their analysis prior to the call for "time" they may submit their analysis to the moderator and leave the competition area. All analysis documents must be submitted to the moderator prior to the competitor leaving the room.
 6. The moderator will call "time" when the 20 minute timer sounds. All competitors must place their hands in the air and back away from their workstations.
 8. Competitors who do not finish in time will submit their analysis to the moderator "as is" for scoring. Points will not be awarded for incomplete sections of the analysis.
 9. The moderator will collect all fingerprint analysis documents from students who have not already submitted their analysis for scoring upon the call of "time". No fingerprint analysis documents shall leave the testing room with a competitor.
 - **Evaluation and Scoring (120 min Time Limit):** After the completion of the entire event and all teams are done, judges will convene to assess each competitor's/team's performance based on a standardized rubric. This stage is conducted without the presence of the competitors. Judges will evaluate the criteria outlined in the rubric to ensure a fair and objective scoring process. Once all assessments are finalized, scores will be recorded for each competitor/team.

Rules

- **Disqualifying Factors:** The use of hinges lifters, magnetic powder, precut lifting tape.

Professional Dress Guidelines

To secure professionalism points, competitors should dress in attire that accurately reflects what professionals in the respective public safety careers would wear while performing the tasks associated with the event. Competitors are also expected to consult and follow the professional dress guidelines in the rulebook to qualify for points. Additionally, participation is contingent upon meeting all prescribed safety protocols.

Safety Protocols

- **Long Pants:** Long pants must be worn secured at the waist and shall not extend past the sole of the shoe. No portion of the leg shall be visible.
- **Jewelry:** Rings must feature a continuous, even, and unadorned exterior surface. Necklaces must not be visible from the outside of the uniform. Bracelets may not be worn. If competitors have piercings beyond a single stud in each ear, they must cover these

additional piercings with band-aids or wear clear studs to maintain a professional appearance.

- **Hair:** All hair must be secured out of the eyes for the duration of the event. Competitors with hair extending past the top of the shoulder shall wear their hair secured neatly in a bun or ponytail ensuring that no hair extends below the collar of the uniform. It is not an exception to the rule that a Competitor's chosen hair style is too thick to be secured above the collar.
- **Shoes:** Competitors must wear low-heeled, closed-toed footwear for this event.
- **Fingernail Length:** Competitors' fingernails shall not extend past the tip of the finger and shall be free of any/all adornments. Color is not a factor.
- **Shirt Sleeves:** If Long sleeve shirts are worn, they shall fit closely at the wrist and not extend past the wrist.
- **Pant Length:** Pants shall not extend past the sole of the shoe.

Judge Qualifications

- Must be familiar with fingerprint lifting techniques and have a working knowledge of latent print examination and identification.

Criteria	Unattempted	Unsatisfactory	Satisfactory	Proficient	Exemplary	Points
Professionalism						
Professional Dress Presents a neat, professional appearance in attire consistent with any recognized industry standard for the career and event tasks. Team members reasonably match in color and style.	0 Attire does not reasonably reflect a recognized industry standard for the career and tasks, or team members do not reasonably match.		3 Attire reflects a recognized industry standard, but noticeable issues with neatness or how clothing is worn detract from professional appearance.		5 Appearance is neat and professional. Attire reflects a recognized industry standard, is worn properly, and reasonably matches among team members.	
Professional Behavior Maintains a professional demeanor, stays attentive and engaged, and communicates appropriately for the role and situation throughout the event.	0 Professional demeanor and role-appropriate engagement are not demonstrated.	1 2 Shows limited professional demeanor. Communication or engagement remains too casual or disconnected from the role.	3 Generally presents professionally, but communication, attentiveness, or engagement is inconsistent.	4 Maintains a professional demeanor, stays engaged, and communicates appropriately for the role.	5 Sustains a professional demeanor and attentive engagement throughout. Communicates with tact and adapts appropriately to the people and situation.	
Fingerprint Backing Card Completion						
Information Completed Competitor must write in: date, case number, lift number, offense/victim, print lifted from, lifted by, Officer ID#, agency/office	0 Nothing completed.	1 Only one or two items are complete or partially complete.	3 5 7 Three to five items are complete.	8 9 Six or seven items are complete.	10 All eight items are correct and complete.	
Sketch/Diagram						
Sketch/Diagram Competitor must complete a sketch/diagram that shows the location of the lifted print on the item.	0 Did not complete.	3 Sketch with no fingerprint indicated and in wrong location on the card.	7 Sketch/diagram complete and with fingerprint identified, but in wrong location on the card.		10 Sketch/diagram complete and in correct location with fingerprint identified.	

Criteria	Unattempted	Unsatisfactory	Satisfactory	Proficient	Exemplary	Points
Fingerprint applied to card						
Lifted print applied to card Lifted print must be applied to card in the correct location.	0 Lift not applied.		3 Lifted print applied to an incorrect location on the card.		5 Lifted print applied to the correct location of the card.	
Fingerprint						
Fingerprint Ridge detail must be visible/readable. Card free of smudges. Tape free of air bubbles in print area. Appropriate amount of powder used.	0 Unattempted.	3 5 7 9 No clear ridge detail.	11 13 15 17 Some clear ridge detail and bubbles and/or smudges in the print area. Improper amount of powder applied.	20 22 24 26 Clear ridge detail, no bubbles or smudges within print area. Proper amount of powder used.	27 28 29 30 Clear ridge details. No air bubbles. No smudges. Proper amount of powder used.	
Safety and Workstation						
Gloves, Cleanup and Trash Disposal Competitor must don gloves, clean their workstation and properly dispose of trash.	0	1 Competitor did not don gloves OR workstation minimally cleaned and trash not properly disposed of.	3 Competitor donned gloves. Workstation not free of black powder and trash not properly disposed of.	4 Competitor donned gloves. Trash properly disposed of, but workstation not free of black powder.	5 Competitor donned gloves. Workstation free of black powder and trash properly disposed of.	
Fingerprint Analysis						
Fingerprint Matched Properly The correct finger of the correct suspect was identified.		0 Fingerprint not properly matched.	6 Fingerprint properly matched.			
Minutiae Must be properly matched, circled and numbered 1 - 5 on the matching print.	0 Not attempted or all incorrect.	3 5 1 or 2 minutiae identified correctly.	12 3 minutiae identified correctly.	14 4 minutiae identified correctly.	18 5 minutiae identified correctly.	

Criteria	Unattempted	Unsatisfactory	Satisfactory	Proficient	Exemplary	Points
Fingerprint Pattern Properly Identified Fingerprint type must properly be identified on answer document: (tented arch, plain arch, radial loop, ulnar loop, plain whorl, central pocket loop whorl, double loop whorl, accidental whorl)		0 Fingerprint not labeled with correct pattern type.	4 Fingerprint labeled with partial correct pattern type. I.E. arch instead of tented arch, whorl instead of accidental whorl etc.		6 Fingerprint labeled with correct pattern type.	
Total Score: _____ / 100 pts						