

# MERIT BADGE SERIES



# FINGERPRINTING



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*"Enhancing our youths' competitive edge through merit badges"*



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# Requirements

1. Give a short history of fingerprinting. Tell the difference between civil and criminal identification.
2. Explain the difference between the automated fingerprint identification systems (AFIS) now used by law enforcement agencies and the biometric fingerprint systems used to control access to computers and places like buildings and airports.
3. Do the following:
  - a. Name the surfaces of the body where friction or papillary ridges are found.
  - b. Name the two basic principles supporting the science of fingerprints and give a brief explanation of each principle.
  - c. Explain what it takes to positively identify a person using fingerprints.
4. Take a clear set of prints using ONE of the following methods.
  - a. Make both rolled and plain impressions. Make these on an 8-by-8-inch fingerprint identification card, available from your local police department or your counselor.
  - b. Using clear adhesive tape, a pencil, and plain paper, record your own fingerprints or those of another person.
5. Show your merit badge counselor you can identify the three basic types of fingerprint patterns and their subcategories. Using your own hand, identify the types of patterns you see.

# Fingerprinting Resources

## Scouting Literature

*Chemistry, Crime Prevention, Law, and Photography* merit badge pamphlets

For more information about or to order Scouting-related resources, see <http://www.scoutstuff.org> (with your parent's permission).

## Books

- Beavan, Colin. *Fingerprints: The Origins of Crime Detection and the Murder Case that Launched Forensic Science*. Hyperion, 2002.
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- Evans, Colin. *The Casebook of Forensic Detection: How Science Solved 100 of the World's Most Baffling Crimes*, updated ed. Berkley Trade, 2007.
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- Rainis, Kenneth G. *Crime-Solving Science Projects: Forensic Science Experiments*. Enslow, 2005.
- Schulz, Karen K. *CSI Expert! Forensic Science for Kids*. Prufrock Press, 2008.
- Siegel, Jay. *Forensic Science: A Beginner's Guide*. Oneworld Publications, 2009.
- Thompson, Robert Bruce, and Barbara Fritchman. *Illustrated Guide to Home Forensic Science Experiments*. Maker Media Inc., 2012.
- Vacca, John. *Biometric Technologies and Verification Systems*. Butterworth-Heinemann, 2007.
- Walker, Pam, and Elaine Wood. *Crime Scene Investigations: Real-Life Science Labs for Grades 6–12*. Jossey-Bass, 2000.
- Wiese, Jim. *Detective Science: 40 Crime-Solving, Case-Breaking, Crook-Catching Activities for Kids*. John Wiley and Sons, 1996.

Young, Karen Romano. *Science Fair Winners: Crime Scene Science*. National Geographic Kids, 2009.

## Organizations and Websites

### FBI Youth

Website: <http://www.fbi.gov/fun-games/kids/kids>

### Latent Print Examination: Fingerprints, Palm Prints, and Footprints

Website: <http://onin.com/fp>

### Young Forensic Scientists Forum

Website: <http://yfsf.aafs.org>

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Dan Bryant—cover (*fingerprint card*)

John McDearmon—pages 6, 7, 8, and 16