



CSI* DETECTIVE KIT

Here's One Way to Finger(print) a Chip Thief

*Chip Science Institute

FIELD: FORENSICS
CONCEPT: FINGERPRINT ANALYSIS

METHOD

To Make Fingerprint Powder

1 Place a pie pan in the kitchen sink and a potato chip in the pie pan. Then ask an adult to burn the chip to a blackened crisp by lighting it with a match.



2 Once the chip has cooled, crush the charred remains into tiny flakes with the back of a spoon. Ta-dah! You've just made fingerprint powder.



3 Store your fingerprint powder in a freezer bag or a small jar.

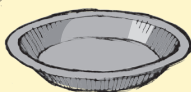


Potato chips are *HIGHLY* flammable. Take special care when burning them.



CHIPS

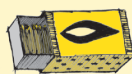
MATERIALS



Metal pie pan



1 potato chip



Matches



Spoon



Freezer bag or small jar



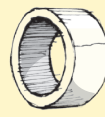
Suspect



Fingerprint card (page 23)



Transparent tape (standard 3/4-inch width)



Clear packing tape (standard 2-inch width)

Continued on next page



Before computers, investigators relied on various nondigital systems of fingerprint classification. One such method—introduced by Sir Edward Henry to Scotland Yard in 1901—classified a number of basic fingerprint patterns, including the arch, loop, and whorl.

To Take Prints (1-Finger Method)

1 Have the suspect rub a pinch of fingerprint powder between his or her thumb and index finger.



2 Have the suspect press the blackened index finger against the sticky side of a piece of transparent tape. Apply the tape to the appropriate box of the fingerprint card.



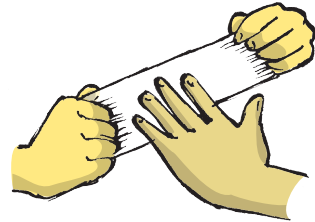
3 Repeat the process as many times (and on as many fingers) as you wish. Compare the prints to the patterns in the illustration above.



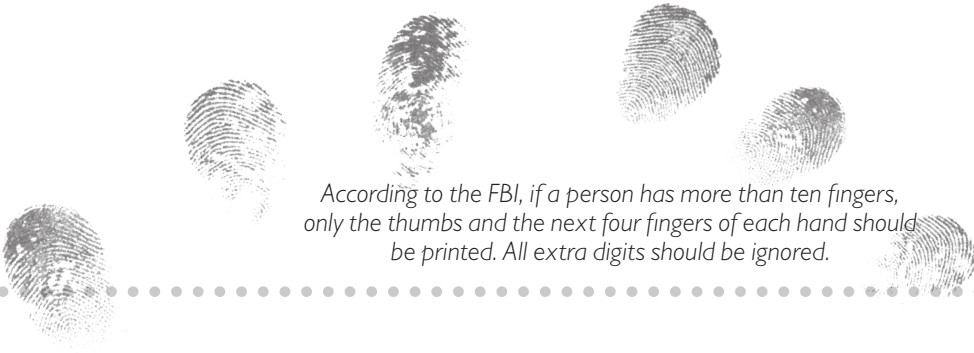
To Take Prints (5-Finger Method)

1 Have the suspect rub fingerprint powder between all five fingertips of one hand.

2 Hold at least 6 inches of clear packing tape, sticky side out.



3 Have the suspect press the pads of the five blackened fingertips against the sticky side of the tape. Then apply the tape to the fingerprint card.



According to the FBI, if a person has more than ten fingers, only the thumbs and the next four fingers of each hand should be printed. All extra digits should be ignored.