

# Investigating Fingerprints

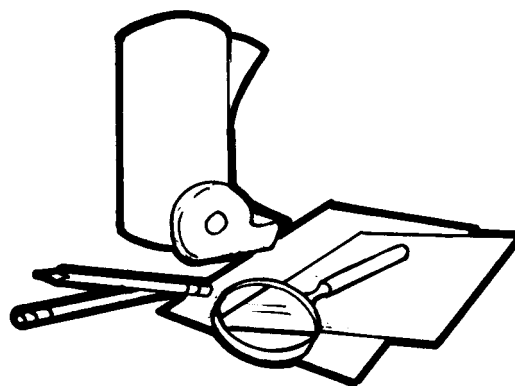
Help students get to know more about the organ that covers and protects their bodies. Investigate how each individual possesses a unique set of fingerprints.

All fingerprints are made up of three basic designs: arch, whorl, and loop.

Have students make fingerprints using the materials and directions below.

## Materials

- magnifying glasses
- copies of page 46
- stamp pads or soft lead pencils
- clear tape
- clean-up materials such as paper towels, soap, and water



## Directions

1. Use one of the following methods to make fingerprints:
  - Rub a soft lead pencil on paper until you produce a good pencil smudge. Rub your finger in the smudge and lift the print off your finger with clear tape.
  - Roll your finger on a stamp pad and roll, not press, the finger on white paper to make an impression.

The first method will be less messy and if done carefully will yield an excellent print.

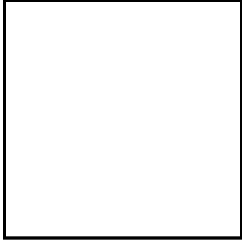
2. Without letting students look, ask them what they would see if they looked very closely at their fingers. Distribute magnifying glasses and ask students to make observations about their fingers. Focus attention on the tips of the fingers and encourage students to look at their fingerprint patterns.
3. Distribute copies of page 46 and ask students to record the fingerprints of both hands on the sheet using one of the methods described above. Model how to make a fingerprint impression. Then have students make their own fingerprints. After their prints are done, ask students to describe the patterns of the fingerprints. Introduce the loop, whorl, and arch patterns at the bottom of page 46 and have students identify which patterns most closely resemble those made by their fingerprints.

## Extensions

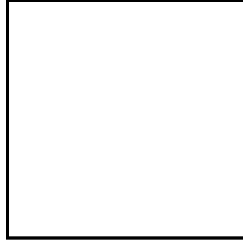
1. Pick out a set of prints made by someone in the class and ask a team of “detectives” with magnifying glasses to identify whose they are.
2. If you have identical twins at school, ask them to record their fingerprints. Compare each set of prints to see if they are also identical. (They will not be.)

# Fingerprint Fun

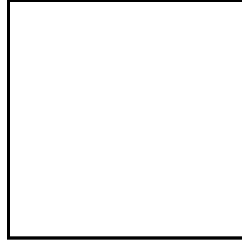
Put your fingerprints in these boxes. Follow the fingerprinting instructions given by your teacher.



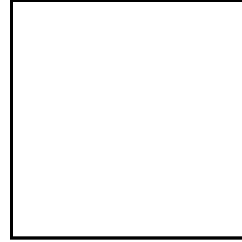
**Left  
Thumb**



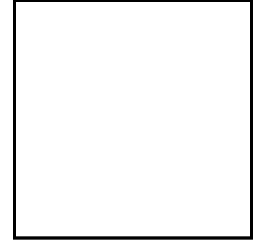
**Left  
Index  
Finger**



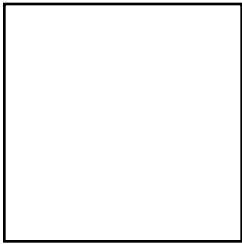
**Left  
Middle  
Finger**



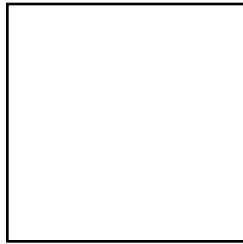
**Left  
Ring  
Finger**



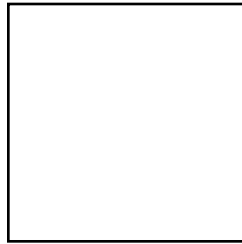
**Left  
Little  
Finger**



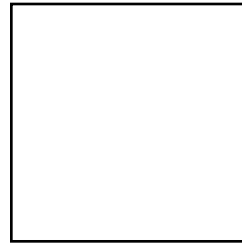
**Right  
Thumb**



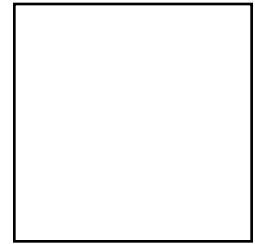
**Right  
Index  
Finger**



**Right  
Middle  
Finger**



**Right  
Ring  
Finger**



**Right  
Little  
Finger**

Examine the fingerprints to see if any of them have the same print.

Next, compare them to the three basic fingerprint designs below. Do any of your fingerprint patterns look like one of the prints below? On each of the lines under your fingerprints write the pattern (arch, whorl, or loop) that resembles your fingerprint most closely.



**arch**



**whorl**



**loop**