

Finger Prints Lab

On the palms and fingers of the hands and the soles of the feet the skin is specialized. It contains raised portions that are ridges. These ridges, which aid the finger's ability to grasp by increasing friction, are called friction ridge skin. The friction ridges deposit perspiration, grease and dirt on any object when touched forming the fingerprints. The patterns formed by the ridge structure of the skin are totally unique and never changes except in size during a person's life span. The number and distribution of the irregular dermal ridges or papillae form the ridge patterns. Your fingerprint patterns are heredity. The fingerprints are formed by the fourth or fifth month of fetal development.

Fingerprints are the most positive means of identifying someone. DNA cannot distinguish between identical twins, but their fingerprints are completely different. Fingerprints are the easiest most frequently used and least invasive means of identifying someone.

Three Finger print types:



Arch



Loop



Whorl

Finger print type statistics: Approximately 65% of all fingerprint patterns can be classified as loops; whorls make up about 30%; and arches the remaining 5 percent

****Finger printing tips**

1. Finger prints should be taken from the top joint of the finger to the finger tip
2. When putting your prints on paper, roll finger from outside left edge all the way to outside right edge

Name: _____

Date _____ HR _____

Purpose

Materials

Procedure

DATA

Right thumb	Right index	Right middle	Right ring	Right little
Left little	Left ring	Left middle	Left index	Left thumb

Identify the type of fingerprint(s) found on your left hand

Identify the type of fingerprint(s) found on your right hand

Group Work

Collect the results of your group in a table by determining the number of fingers that can be identified as a loop, whorl, or arch.

Group Data

	Loop	Arch	Whorl
Number of fingers	15	10	5

Create a graph to display the data your group collected in the table

1. Compare your own finger prints data to the data collected by your group. Are your finger prints a good representation of the group? Why or why not.
2. Do the results of your group match the trend for the world-wide statistics for types of finger prints? Why or why not.

Collect the results of the class in a table by determining the number of fingers that can be identified as a loop, whorl, or arch

Class Data

	Loop	Arch	Whorl
Number of fingers	114	57	19

Create a graph to display the class data you collected in the table

1. Compare your own finger prints data to the data collected by your class
Are your finger prints a good representation of the group? Why or why not.
2. Compare your group finger prints data to the data collected by your class
Are your group's finger prints a good representation of the class's? Why or why not.
3. Do the results of your class match the trend for the world-wide statistics for types of finger prints? Why or why not.