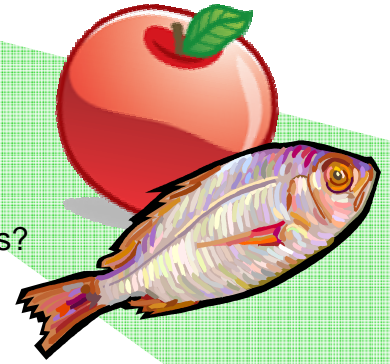


# Uniquely U



**QUESTION:** What characteristics are used to classify fingerprints?

**MATERIALS:**

Fingerprint patterns  
Fingerprint set  
magnifying lens  
pencil #2 (soft lead)

paper (8.5" X 11")  
paper towels  
transparent tape

**PROCEDURE:**

1. Use your magnifying lens to carefully examine each sample fingerprint in the Fingerprint Patterns Set sheet provided.
3. Classify each fingerprint sample in the set as to the type of fingerprint it is. Record this by marking the appropriate box in Data Sheet A.
4. Compare your classification of the fingerprints with the classification of other classmates.
5. Refer to the Making Fingerprints sheet as you read how to make a fingerprint.
  - a. Use the pencil to rub a small patch of graphite onto a piece of paper.
  - b. Rub your finger back and forth across the graphite. **IMPORTANT:** Blacken the fleshy part of the fingertip, not the top near the nail.
  - c. Use a piece of tape to “lift” the fingerprint directly from the finger.
  - d. Place the tape on a clean part of the paper and examine the print.
  - e. Practice making several fingerprints in this way until you have perfected the technique. Make sure you can make a clean fingerprint before going on to step 6.
6. Follow the procedure above to make a clean set of fingerprints from either your right or left hand. Place your set of fingerprints in Data Sheet B. Be sure to write down which hand you used.
7. Determine your fingerprint formula and record it on Data Sheet B. A fingerprint formula is the list of print classifications for one hand, FROM THUMB TO PINKIE.  
arch= A      loop= L      whorl = W
8. Record the fingerprint formulas for the class on Data Sheet C. Create a graph that displays the fingerprint formulas for the class.

**QUESTIONS:**

1. Why are fingerprints so useful in identifying people?
2. What are the three main categories of fingerprints?
3. Do all fingerprints fit one of these categories? Why or why not?

**LS – Activity #46**

**DATA:**

**DATA SHEET A: FINGERPRINT CLASSIFICATION**

SAMPLE	ARCH	LOOP	WHORL	OTHER
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

**DATA SHEET B: PERSONAL FINGERPRINTS**

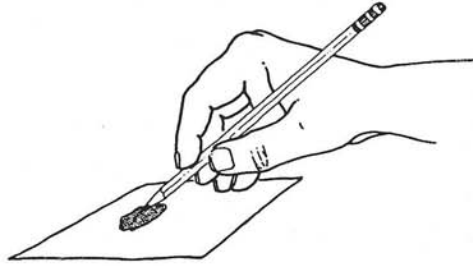
THUMB	INDEX FINGER	MIDDLE FINGER	4 <sup>TH</sup> FINGER	PINKIE

HAND USED \_\_\_\_\_ FINGERPRINT FORMULA \_\_\_\_\_

**DATA SHEET C: CLASS DATA**

////////////////////	ARCH	LOOP	WHORL	OTHER
THUMB				
INDEX FINGER				
MIDDLE FINGER				
4 <sup>TH</sup> FINGER				
PINKIE				

# MAKING FINGERPRINTS



# FINGERPRINT PATTERNS SET



1



2



3



4



5



6



7



8



9



10