

## Anthropometry Activity

Anthropometry is the use of systematic body measurements to distinguish one individual from another. Alphonse Bertillon began developing this process in 1879.

Anthropometry was used for nearly two decades as the most accurate way of personal identification.

Bertillon used a battery of body measurements to help create his identification system. The table below lists some of the body areas he used to identify individuals. Have a partner take these measurements for you and record your information below.

**Table 1**

<u>Body Area</u>	<u>Measurement (cm)</u>	<u>Body Area</u>	<u>Measurement (cm)</u>
Skull		Leg length	
Length of head		Arm length -elbow to wrist	
Width of head		Arm length-wrist to top middle finger	
Foot		Outstretch reach of both arms	
Trunk (torso)		Hand-open pinky to thumb	
Distance between eyes		Left middle finger length	
Body height		Length of right ear	
Weight		Width of right ear	

The bones of the feet can tell a lot about a person. They can indicate the diet of the individual, injuries and even what kind of labor they performed. Can bones provide a link to a person's height? Forensic anthropologists can help law enforcement solve crimes when it involves skeletal remains.

As human bone growth occurs, it is proportionate to an individual's height. If a forensic anthropologist has the length of a foot, they can estimate the height of an individual. Let's take a look to see how accurate this method is.

**Procedure:**

1. Have a partner take your height. Be sure to stand against a wall to make the measurement more accurate. Record the measurement below.

Height (cm) \_\_\_\_\_

2. Remove a shoe and measure the length of your foot. This should be the distance from the longest toe to the most posterior point on the heel of the foot while the subject is standing with their weight evenly distributed. Record the measurement below.

Foot Length (cm) \_\_\_\_\_

3. Add your results to the chart in the front of the room
4. Examine the numbers to see if you can find any pattern. Write a pattern that you see below.

5. Divide the length of each person's left foot by his/her height. Multiply the quotient by 100. What do you get?

6. Try this method with one other person outside of the class and see if it works.