![C:\Users\lnyland\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\4LZ3T250\antique_anatomy_illustration__human_skeleton_circa_1911_sjpg3242[1].jpg]() No Bones About It

**Question**: How can bones be used to identify missing people?

**Knowledge Probe:**

Answer the following questions on your data sheet:

1. Take your best guess as to how many bones you have in your body.
2. Can you name any bones? Which ones?
3. Are there any relationships between the size of your bones and your height? Explain.
4. Give an example of a crime scene scenario in which you might find bones. What types of locations would you expect to find these bones?

**Background:**

Forensic Anthropology is a unique forensic discipline that studies the human skeleton to answer various questions about an individual’s race, sex, age, height, illness, and trauma. In this particular exercise students will explore: 1.) How a single bone can reveal a person’s overall height and 2.) How this information can be used to make presumptive identifications.

A person’s height can be affected by several variables: age, sex, race, health, etc. Anthropologists have compiled several formulas for determining the approximate height of an individual given the length of any of the long bones of the human body. However, these formulas only give approximations of height – they are not exact.

One of the main factors affecting a person’s height is age. The formulas provided are designed for individuals 23 – 30 years old. Before the ages of 18 – 23, a person’s bones have yet to fully ossify. Ossification is the natural replacement of cartilage with bone; it is responsible for nearly all bone growth. Because these bones are still growing, the relationship between bone length and an individual’s height is extremely variable.

**Investigation Plan**:

Part 1: Use your textbook to fill in the designated bones on the skeleton, skull, and pelvis diagrams on your data sheet.

Part 2: Use Table 1: Formulas for Calculating Height to determine the height of each person from which bones #1-6 originated. Be sure to take into account the type of bone, race, and sex of each bone when referencing the table. Answer the questions on your data sheet.

Part 3: Use the results from the missing person’s database and answer the questions on your data sheet.

Table 1: Formulas for Calculating Height

Table 3: Missing Persons Database

