

Forensic Anthropology



Let the bones tell the story!

Image: http://upload.wikimedia.org/wikipedia/commons/4/4c/Punuk_Alaska_skulls.jpg

Presentation developed by T. Trimpe 2010 <http://sciencespot.net>



What role do anthropologists play in solving crimes?

Watch VIDEO #1 and then answer the questions.

1. What does a physical anthropologist do?

*Analyze **human** remains to determine the **identity** of a victim as well as his/her life **history**, cause of **death**, or other **clues** about a crime.*

2. What four things do we want to know about a skeleton? Which bones do we use?

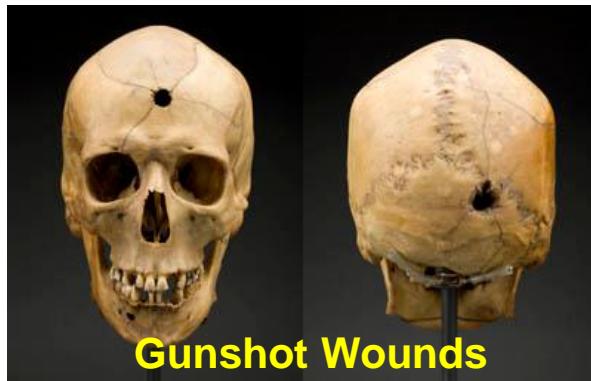
- *Sex - Determined by examining the skull, pelvis, humerus, and femur*
- *Age and stature (height/build) – Determined by analyzing the development of the teeth, bone growth, cranial suture lines, and the length of specific bones, such as the femur.*
- *Race – Determined by analyzing the skull for characteristics that are common among people of different races.*

3. What else can we learn from bones?

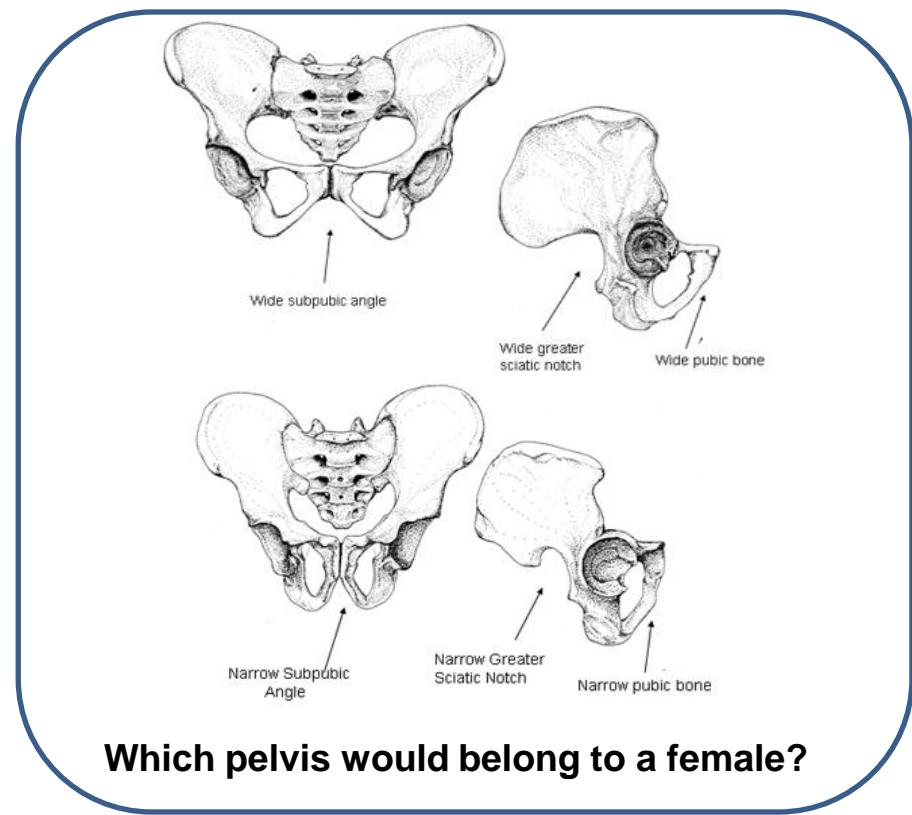
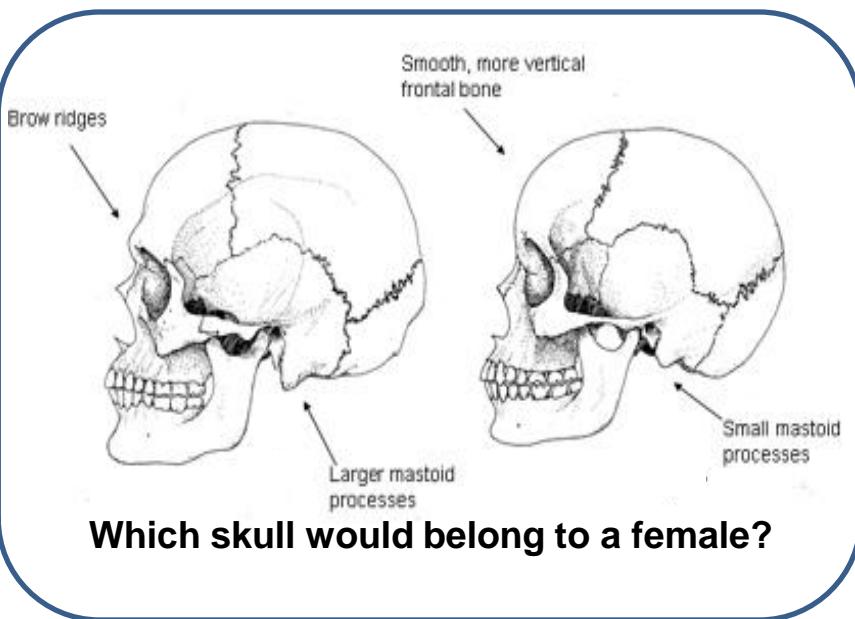


DNA samples can be collected from bone, teeth, and hair to provide clues to a person's identity.

Scientists may also be able to gain clues as to a person's past, recent injuries, or the cause of death based on bone fractures and other signs of trauma.



Which is which?



Think About It ...
**How could teeth provide
clues about a skeleton?**



Career Connection

What does a forensic anthropologist do? Watch VIDEO #2 to find out!

1. Where does she work? **FBI Laboratory**

2. What information can she identify from a skeleton?

If it was a **MALE** or **FEMALE**, how **OLD** they were when they died, **ANCESTRAL** background, and **HEIGHT**.

3. What are some examples of skeletal trauma?

Gunshot wounds, blunt force trauma (knife)

4. What does she recommend a person studies in school for her career?

Science classes and field work in anthropology



Reading the Remains

Watch VIDEO #3 and then answer the questions.

1. Where is the lab located? **Smithsonian @ Washington DC**

2. What information do they provide for law enforcement agencies?

They help in locating and recovering bodies. They help determine the cause of death and other details about the person.

3. How many skeletons do they have in their collection?

30,000

4. What do they learn about a skeleton from each tool?

CT Scan/ X-ray – **Analyze internal bone structure; identify disease or trauma**

Mass spectrometer – **Tests for chemicals, heavy metals, & trace elements**

Scanning electron microscope – **Magnifies small details of bone**

DNA Analysis – **Test samples of bone to identify remains**