

Name _____ Date _____

BITS AND PIECES

A Lab on Using Bones to Identify a Missing Person

Objectives

You will identify pieces of bone.

You will use these pieces of bone to identify a missing person.

Background Information

In Springfield, a demolition crew is tearing down the old mill, a fixture in downtown Springfield for about 100 years. The last piece of the building to be removed is the cornerstone. The Springfield City Council plans to display it in Hunter Park. However, the crew has found some bone fragments under the cornerstone, and they have stopped working while investigators and a forensic anthropologist examine the remains.

The bone fragments are taken to the lab, and city records are researched to help determine to whom these might belong. Missing person records from 1899 and 1900 indicate that there were four unsolved cases. Copies of those case records are shown here.

Materials

Bone Fragment Handout

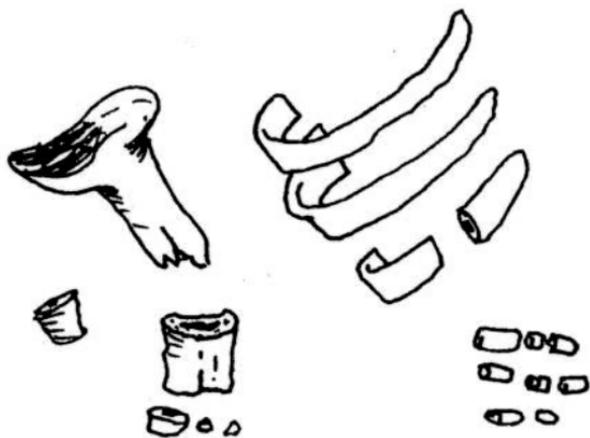
Scissors

Ruler

Procedure

1. Cut out the bone fragments on the Bone Fragment Handout.
2. Compare these fragments to the adult male and female skeletons in Figures 28A and B of "Making No Bones About It."
3. Determine the following and record in the Data Table:
 - a. To what bones do these fragments belong?
 - b. After examining each fragment, comment on the following:
 - ◆ whether the victim was male or female
 - ◆ the approximate age of the victim
 - ◆ any unusual features of the victim's anatomy

Bone Fragment Handout



MISSING PERSON REPORT**DATE** January 15, 1899 **CASE NUMBER** 75342**NAME** Dale McPherson **AGE** 62**DESCRIPTION** 6'1" tall, 210 lbs., brown hair, brown eyes, last seen wearing overalls and wool coat.**DISTINGUISHING MARKS** Injured left leg which caused Mr. McPherson to limp**REPORTED BY** Susan McPherson, wife**INFORMATION ON CASE** When Mrs. McPherson returned from her sister's home 10 miles away, Mr. McPherson was not at home, and she has not seen him since. He left no note, which was his custom when he was away from the house, and had no plans to travel. Mr. McPherson had not been well for the last five years, and only worked on his farm part time. Because of his illness, he was in debt to the S & R Bank, a situation that caused him considerable stress.**INVESTIGATOR** Thomas White, Sheriff

MISSING PERSON REPORT**DATE** September 5, 1900 **CASE NUMBER** 81220**NAME** Nell Blankenship **AGE** 2 years**DESCRIPTION** About 30 lbs., blond hair, blue eyes, toddling, teething. Last seen in a wagon parked outside of Freeman's Feed and Seed on Juniper Street.**DISTINGUISHING MARKS** None**REPORTED BY** Mark and Sarah Blankenship, parents**INFORMATION ON CASE** Mr. and Mrs. Blankenship had ridden into town to get supplies for their livestock. Nell was with them, playing in the back of the wagon with her puppy. When they arrived at the Feed and Seed, they noticed a commotion inside, and jumped out of the wagon to investigate. They found Mr. Freeman wrestling a young man who had tried to steal a bridle. After helping Mr. Freeman subdue the thief, Mrs. Blankenship returned to the wagon to get Nell, but she and the puppy were gone.**INVESTIGATOR** Charlie McAlister, Deputy

MISSING PERSON REPORT**DATE** November 7, 1900 **CASE NUMBER** 88342**NAME** Sue Ellen Henderson **AGE** 19**DESCRIPTION** 5'4" tall, 112 lbs., last seen wearing a blue dress, feather hat, and boots.**DISTINGUISHING MARKS** Large mole on left cheek**REPORTED BY** Frank Howell

INFORMATION ON CASE Mr. Howell and Miss Henderson were engaged to be married. On the day of their wedding, November 6, she did not appear at the church. Her parents said that she was gone when they got up that morning. They do not know when she left. Spud Dickerson, clerk at the train station, said that Miss Henderson was sitting at the depot late at night on the evening of November 5.

INVESTIGATOR Charlie McAlister, Deputy

MISSING PERSON REPORT

DATE November 29, 1900 CASE NUMBER 89002

NAME Florence Rowe AGE About 70

DESCRIPTION 5'2" tall, 150 lbs., white hair, loose black dress (last seen by neighbors in August, 1900).

DISTINGUISHING MARKS Stooped when she walked, persistent cough, fingers disfigured by arthritis

REPORTED BY Lawrence Adams, neighbor

INFORMATION ON CASE Mrs. Rowe is a recluse who lives alone and is rarely seen by her neighbors. Mr. Adams believes that she is wealthy, even though she lives in a small home that she maintains by herself. Mr. Adams heard that the late Mr. Rowe left her a lot of money when he died. Mrs. Rowe keeps a small vegetable garden and a few head of cattle. The only reason that Mr. Adams believes that Mrs. Rowe is missing is because he hasn't seen her cows in the pasture for about a week.

INVESTIGATOR Ralph Prescott, Assistant Deputy

DATA TABLE

Information from examination of bone fragments.

<i>Bone fragment</i>	<i>Bone from which this fragment originated</i>	<i>Comments or details about this bone fragment</i>
A		
B		
C		
D		
E		

Postlab Questions

1. Could these fragments have belonged to any of the missing persons? If so, which one? What evidence supports your answer?

2. How can you distinguish male and female pelvic bones?

3. What distinguishes a male from a female skull?

4. Name three ways you can determine whether a skeleton belongs to an infant or an adult.

5. Could these bone fragments have belonged to a 30-year-old man? Why or why not?
