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January 31, 2013

Human Body Systems 1A

Mrs. Drennon

**Activity 1.2.3- Formal Case Report**

**Introduction**:

 There are 206 bones in the human body. Each have a specific job including supporting the body, producing movement, and protecting internal organs. The specific structures of a person’s bone can reveal information about their gender, height, age, and ethnicity. Also, these are usually the first clues scientists use to identify the remains of a missing person. For example, in this activity, a young couple was out for a morning run when they came across a human skull followed up by two human skeletons. We, as students, have taken the roll of an anthropologist to examine the skeletal remains. Our job is to identify these individuals through observation and measurement in order to provide the police with important information and evidence.

**Summary of Findings:**

As a result of our research and findings, we discovered that one of the skeletal remains belong to a white male around the ages of 20 to 30. We were able to come to this conclusion by observing and measuring different parts of the skeletal remains including the skull, pelvis, femur, and humerus. The measurements of the widths, lengths, shapes, and structures all fall into the categories of average measurements for a white male. We measured these remains using tools such as protractors, rulers, and vernier clippers. We also were able to determine a height range of 5’4-5’8 for this missing person based of off maximum length measurements and regression formulas.

**DNA Analysis:**

 According to the Gel Electrophoresis results, we were able to observe that Bone Cut 1 matches up with Suspect 1 Cut 1 and Suspect 2 Cut 1 because they each have been cut twice by restriction enzymes. We also were able to discover that Bone Cut 2 matches up with Suspect 2 Cut 2 because they were also cut twice in the same places by restriction enzymes during this lab.

**Further Analysis:**

The FBI on file on facial reconstruction was a very interesting technique to use in anthropology. This type of technique could be very useful in this type of case in order to identify the two skeletons being examined in this project. From these tests, we can learn basic bone and facial structure, appearance, gender, race, and age of an unknown person. This information can be used to correctly identify a missing person through media and the help of family members.

**Conclusion:**

In conclusion, we discovered that one of the skeletal remains belong to a white male around the ages of 20 to 30. We were able to determine this information through observation, knowledge, and measurements. This information will soon be helpful to police and family members to help identify the identity of these missing people.