Sherlock Bones:
Identification of Skeletal Remains Lab Activity

Aligned with All Published National Standards

ward's science

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framework for K-12 science education © 2012

** The Dimension I practices listed below are called out as **bold** words throughout the activity.*

DIMENSION 1 — Science and Engineering Practices

✕	Asking questions (for science) and defining problems (for engineering)	✕	Use mathematics and computational thinking
✕	Developing and using models	✕	Constructing explanations (for science) and designing solutions (for engineering)
✕	Planning and carrying out investigations	✕	Engaging in argument from evidence
✕	Analyzing and interpreting data	✕	Obtaining, evaluating, and communicating information

DIMENSION 2 — Cross Cutting Concepts

✕	Patterns		Energy and matter: Flows, cycles, and conservation
	Cause and effect: Mechanism and explanation	✕	Structure and function
✕	Scale, proportion, and quantity		Stability and change
✕	Systems and system models		

DIMENSION 3 — Core Concepts

Discipline	Core Idea Focus
Life Science	LS2: Ecosystems: Interactions, Energy, and Dynamics
	LS3: Heredity: Inheritance and Variations of Traits
	LS4: Biological Evolution: Unity and Diversity

✕ Indicates standards covered in activity

next generation science standards © 2013

High School Standards Covered
HS.LS2-2: Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales.
HS.LS3-3: Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population.
HS.LS4-3: Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait.

standards/learning objectives

national science education standards © 1996

Content Standards (K-12)			
✕	Systems, order, and organization	✕	Evolution and equilibrium
✕	Evidence, models, and explanation	✕	Form and Function
✕	Constancy, change, and measurement		

Life Science Standards Middle School		Life Science Standards High School	
✕	Structure and Function in Living Systems	✕	Molecular Basis of Heredity
✕	Reproduction and Heredity	✕	Biological Evolution
✕	Populations and Ecosystems		
✕	Diversity and Adaptations of Organisms		✕ Indicates standards covered in activity

benchmarks for science literacy (AAAS, © 1993)

1. The Nature of Science	1B: Scientific Inquiry
2. The Nature of Mathematics	2A: Patterns and Relationships
5. The Living Environment	5A: Diversity of Life
	5B: Heredity
	5F: Evolution of Life
6. The Human Organism	6A: Human Identity
	6B: Human Development
9. The Mathematical World	9D: Uncertainty
11. Common Themes	11A: Systems
	11B: Models
	11C: Constancy and Change

activity objectives:

- Become familiar with tools and key skeletal features used by forensic anthropologists

- Utilize qualitative observations and quantitative measurements of skeletal bones to determine the sex, race, height, and approximate age of an individual at the time of death

time requirement:

This activity can take up to two 45-60 minutes lab periods to complete.