SKELETONS: Museum of Osteology

Animal CSI

Project Lead the Way (PLTW)

Grade Levels: 6th-8th

English

7.RI.4—Reading Informational
7.RI.4: Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.

7.W.1—Writing
7.W.1: Write arguments to support claims with clear reasons and relevant evidence.

7.W.1.b—Writing
7.W.1.b: Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.

7.W.1.c—Writing
7.W.1.c: Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence.

7.L.3—Language
7.L.3: Use knowledge of language and its conventions when writing, speaking, reading, or listening.

7.L.4—Language
7.L.4: Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.

7.L.4.a—Language
7.L.4.a: Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.

7.L.6—Language
7.L.6: Acquire and use accurately grade-appropriate general academic and domain specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Math

CCSS.MATH.CONTENT.5.MD.A.1: Measuring and Data
5.MD.A.1: Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.

Biological Science

MS-LS1-2 From Molecules to Organisms: Structures and Processes
MS-LS1-2: Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function.

NGSS.MS-LS1-3—From Molecules to Organisms: Structures and Processes
MS-LS1-3: Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.

MS-LS1-4 From Molecules to Organisms: Structures and Processes
MS-LS1-4: Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

MS-LS1-5 From Molecules to Organisms: Structures and Processes
MS-LS1-5: Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

1.11—Foundation Standard 1: Academic Foundation
1.11: Understand human anatomy, physiology, common diseases and disorders, and medical math principles. Identify basic levels of organization of the human body
a. Chemical b. Cellular c. Tissue d. Organs e. Systems f. Organism

1.13—Foundation Standard 1: Academic Foundation
1.13: Understand human anatomy, physiology, common diseases and disorders, and medical math principles. Analyze basic structures and functions of human body systems (skeletal, muscular, integumentary, cardiovascular, lymphatic, respiratory, nervous, special senses, endocrine, digestive, urinary, and reproductive).

a. Skeletal (bone anatomy, axial and appendicular skeletal bones, functions of bones, ligaments, types of joints)
b. Muscular (microscopic anatomy of muscle tissue, types of muscle, locations of skeletal muscles, functions of muscles, tendons, directional movements.

1.21—Foundation: Standard 1: Academic Foundation
1.21: Understand human anatomy, physiology, common diseases and disorders, and medical math principles. Describe common diseases and disorders of each body system (such as: cancer, diabetes, dementia, stroke, heart disease, tuberculosis, hepatitis, COPD, kidney disease, arthritis, ulcers).
a. Etiology b. Pathology c. Diagnosis d. Treatment e. Prevention

1.32—Foundation: Standard 1: Academic Foundation
1.32: Understand human anatomy, physiology, common diseases and disorders, and medical math principles. Demonstrate the ability to analyze diagrams, charts, graphs, and tables to interpret healthcare results.

Foundation Standard 1: Academic Foundation

Healthcare professionals will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. The following accountability criteria are considered essential for students in a health science program of study.

1.1 Human Structure and Function

1.11 Classify the basic structural and functional organization of the human body (tissue, organ, and system).

1.13 Analyze the basic structure and function of the human body.

1.2 Diseases and Disorders

1.21 Research common diseases and disorders of each body system (prevention, pathology, diagnosis, and treatment).

1.3 Medical Mathematics

1.31 Apply mathematical computations related to healthcare procedures (metric and household, conversions and measurements).

1.32 Analyze diagrams, charts, graphs, and tables to interpret healthcare results.

2.11—Foundation Standard 2: Communications

2.11: Demonstrate methods of delivering and obtaining information, while communicating effectively. Model verbal and nonverbal communication.

2.15—Foundation Standard 2: Communications

2.15: Demonstrate methods of delivering and obtaining information, while communicating effectively. Practice speaking and active listening skills.