CCSD 798 Request for Approval of Student Travel

Educational Value/Nevada Standards Supported Examples

Elementary – Grades 4-6\*

Students engage with perfectly preserved specimens and medical docents to better understand the structure and functions of organs and the human body, aligned with life science curriculum and standards.

Examples of aligned Nevada standards:

* 4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.
* 4-LS1-2. Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.
* 5-PS3-1. Use models to describe that energy in animals’ food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.
* \*For 6 grade standards, look at the middle school selection below.

Middle School – Grades 7-8

Students engage with perfectly preserved specimens and medical docents to better understand the structure and functions of organs and the human body, aligned with life science curriculum and standards.

Examples of aligned Nevada standards:

* MS-LS1-3. Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.
* MS-LS1-8. Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.
* MS-LS1-5. Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.
* MS-LS4-2. Apply scientific ideas to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer evolutionary relationships.
* MS-LS4-3. Analyze displays of pictorial data to compare patterns of similarities in the embryological development across multiple species to identify relationships not evident in the fully formed anatomy.
* MS-LS4-4. Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals’ probability of surviving and reproducing in a specific environment.

High School – Grades 9-12

Students engage with perfectly preserved specimens and medical docents to better understand the structure and functions of organs and the human body, aligned with life science curriculum and standards.

Examples of aligned Nevada standards:

* HS-PS2-1. Analyze data to support the claim that Newton’s second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration.
* HS-PS3-2. Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as a combination of energy associated with the motions of particles (objects) and energy associated with the relative position of particles (objects).
* HS-LS1-1. Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells.
* HS-LS1-2. Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
* HS-LS1-3. Plan and conduct an investigation to provide evidence those feedback mechanisms maintain homeostasis.
* HS-LS1-7. Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed resulting in a net transfer of energy.
* HS-LS4-1. Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence.
* HS-LS4-4. Construct an explanation based on evidence for how natural selection leads to adaptation of populations.