

## **DESERT CONNECTIONS FOR GRADES 7 & 8**

### **SCIENCE CONTENT STANDARDS**

Grade 7th Evolution: 3. Biological evolution accounts for the diversity of species developed through gradual processes over many generations. As a basis for understanding this concept: a. Students know both genetic variation and environmental factors are causes of evolution and diversity of organisms. c. Students know how independent lines of evidence from geology, fossils, and comparative anatomy provide the bases for the theory of evolution. d. Students know how to construct a simple branching diagram to classify living groups of organisms by shared derived characteristics and how to expand the diagram to include fossil organisms. e. Students know that extinction of a species occurs when the environment changes and that the adaptive characteristics of a species are insufficient for its survival.

Earth and Life History (Earth Science): 4. Evidence from rocks allows us to understand the evolution of life on Earth. As a basis for understanding this concept: a. Students know Earth processes today are similar to those that occurred in the past and slow geologic processes have large cumulative effects over long periods of time.

Investigation and Experimentation: 7. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will: c. Communicate the logical connection among hypotheses, science concepts, tests conducted, data collected, and conclusions drawn from the scientific evidence.

Grade 8th Investigation and Experimentation: 9. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will: b. Evaluate the accuracy and reproducibility of data.

### **HISTORY- SOCIAL SCIENCE CONTENT STANDARDS**

None

### **LANGUAGE ARTS CONTENT STANDARDS**

Grade 7th - Listening and Speaking Strategies: Comprehension: 1.1 Ask probing questions to elicit information, including evidence to support the speaker's claims and conclusions. 1.2 Determine the speaker's attitude toward the subject. 1.3 Respond to persuasive messages with questions, challenges, or affirmations.

Grade 8th - Listening and Speaking Strategies: 1.1 Analyze oral interpretations of literature, including language choice and delivery, and the effect of the interpretations on the listener. 1.2 Paraphrase a speaker's purpose and point of view and ask relevant questions concerning the speaker's content, delivery, and purpose.

### **MATHEMATICS CONTENT STANDARDS**

Grade 7th - Mathematical Reasoning: 1.0 Students make decisions about how to approach problems: 1.1 Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, identifying missing information, sequencing and prioritizing information, and observing patterns.

Grade 8th - Probability and Statistics: 1.0 Students know the definition of the notion of independent events and can use the rules for addition, multiplication, and complementation to solve for probabilities of particular events in finite sample spaces.