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| **Learning Goals:**  **Natural Selection and the Theory of Evolution** | |
| **Guiding Question**:  How do scientists explain the similarities and variation in different organisms over time? | |
| Content Goals Students will be able to:   * Describe how the process of Natural Selection causes populations to change over time * Use the theory of evolution to explain how diversity of life on Earth has changed over geologic time * Compare punctuated equilibrium and gradualism as two evolutionary processes * Analyze and interpret evidence supporting the theory of evolution, including:   molecular studies,  biogeography,  the fossil record, and  embryology | Skills Goals Students will be able to:   * Identify topic of text * Summarize main idea in text * Summarize supporting statements used to develop the main idea * Present data in well-organized tables * Present data in informative graphs * Include properly referenced quote in paragraph * Write APA citation for source used |
| **Organizing Ideas** (Big Ideas and Links between Big Ideas)  Students will understand:  - how variation within species and between species occurs  - how natural selection is the driving mechanism for evolution | |
| **Assessment** – How will I know if students have mastered content, skills, and big ideas?  - Summary and analysis of scientific article  - Student-generated data tables and graphs  - Individual assessments such as tests and quizzes | |

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| **Key Vocabulary** | |
| **Frequency Distribution**  **Histogram**  **Variation**  **Mean**  **Mode**  **Median**  **Range**  **Hypothesis**  **Theory**  **Adaptation**  **Natural selection**  **Artificial selection** | **Evolution**  **Speciation**  **Diversity**  **Differential Reproductive Success**  **Gradualism**  **Punctuated equilibrium**  **Gene**  **Gene pool**  **Mutation**  **Trait** |

 

