**Kiser Middle School**

**Lesson Plan Template**

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| **SUBJECT** | **Science** | **GRADE** | **8** |
| **DATE** | **10-15 to 10-16** | **PERIOD** | **All** |
| **Essential Standards** | **8.L.4 Understand the evolution of organisms and landforms based on evidence, theories and processes that impact the Earth over time.**  8.L.4.1 Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological  classification systems and the theory of evolution.  8.L.4.2 Explain the relationship between genetic variation and an organism’s ability to adapt to its environment. | | |
| **Essential Question** | **How does the Theory of Evolution explain the diversity of life on Earth?**  **What evidence is there for the Theory of Evolution?** | | |
| **I Can Statements** | **…….make predictions about the Earth’s past and future based on Uniformitarianism**  **……..explain who Darwin was and where his ideas came from.**  **…….give examples of evidence that Darwin used for his theory.**  **……explain how natural selection could lead to change in species.** | | |
| **Vocabulary** | Uniformitarianism, James Hutton, Charles Darwin, Continental Drift, Alfred Wagner, Plate Tectonics, Seafloor Spreading, Comparative Anatomy, Natural Selection, Analogous Structures, Homologous Structures, Embryological Similarities, Evolution, Theory of Evolution, Mutations | | |
| **H.O.T. Question(s) Higher Order Thinking Questions** | **Why is it appropriate to say that evolution is occurring even while still talking about evolution being a theory?**  **Why is evolution considered a theory when there is a huge amount of evidence supporting it?**  **How might natural selection alter the human species?**  **How are geologic and biologic evolution connected?**  **Why has better understanding of genetics provided evidence for the theory of evolution?** | | |
| **Material/**  **Manipulatives** |  | | |
| **Technology Integration** | **Students will use interactive websites to learn about natural selection. They will work individually with several and in a group with the Sepup Lab.** | | |
| **Warm Up** |  | | |
| **Hook/**  **Cultural Connection** |  | | |
| **Me: Modeled** |  | | |
| **We: Shared** |  | | |
| **Minute By Minute Assessment** |  | | |
| **Few: Guided Practice** | **Work to complete Sepup Natural Selection Lab with partners.** | | |
| **You: Independent Practice** | **Work to complete the Phet and No Where to Hide activity** | | |
| **Summary** |  | | |
| **Corrective Instruction** |  | | |
| **What is Going On?** | **No Where to Hide** <http://sciencenetlinks.com/esheets/nowhere-to-hide/>  **Phet Natural Selection** <https://phet.colorado.edu/en/simulation/natural-selection>  **Sepup Natural Selection** <http://sepuplhs.org/high/sgi/teachers/evolution_act11_sim.html>  **Sepupp Natural Selection Worksheet** <http://sepuplhs.org/sgi/evolution/sgi_evolution_ss_11_1.pdf> | | |