**Kiser Middle School**

**Lesson Plan Template**

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| --- | --- | --- | --- |
| **SUBJECT** | **Science** | **GRADE** | **8** |
| **DATE** | **10-17** | **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 is life on Earth Classified?** | | |
| **I Can Statements** | **…….use a cladogram to determine the relationship between species.**  **…….understand how closely organisms are related using their scientific classification** | | |
| **Vocabulary** | **kingdom, phylum, class, order, family, genus, species, cladogram,** | | |
| **H.O.T. Question(s) Higher Order Thinking Questions** | **Why would where a species lives not be a useful piece of information to help classify it?**  **What is the basis of the system of classification?**  **Scientists tell us that our human species contains DNA from a different species, *Homo neanderthalensis*. How could this be possible?**  **The scientific name for humans is *Homo sapien*. Will this ever change? Explain** | | |
| **Material/**  **Manipulatives** | **Fish Classification Cards** | | |
| **Technology Integration** | **Webquest on Classification** | | |
| **Warm Up** | **Give students the fish cards and have them identify the eight fish species.** | | |
| **Hook/**  **Cultural Connection** |  | | |
| **Me: Modeled** | **Introduce the idea of classification with the saying “King Phillip Came Over For Gold & Silver. Ask students what this could have do to with science and classification of life. Once they have expressed their thoughts, introduce the levels of classification. Based on the activity, they should be able to tell what the system of classification is based upon.** | | |
| **We: Shared** |  | | |
| **Minute By Minute Assessment** |  | | |
| **Few: Guided Practice** |  | | |
| **You: Independent Practice** | **Students will complete a variety of web-based activities to reinforce the classification system ideas.** | | |
| **Summary** |  | | |
| **Corrective Instruction** | **Monitor computer use to make sure they are staying on things I want.** | | |
| **What is Going On?** |  | | |

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| --- | --- | --- | --- |
| **SUBJECT** | **Science** | **GRADE** | **8** |
| **DATE** | **10-18 to 10-19** | **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 is life on Earth Classified?** | | |
| **I Can Statements** | **…….use a cladogram to determine the relationship between species.**  **…….understand how closely organisms are related using their scientific classification** | | |
| **Vocabulary** | **kingdom, phylum, class, order, family, genus, species, cladogram,** | | |
| **H.O.T. Question(s) Higher Order Thinking Questions** | **Why would where a species lives not be a useful piece of information to help classify it?**  **What is the basis of the system of classification?**  **Scientists tell us that our human species contains DNA from a different species, *Homo neanderthalensis*. How could this be possible?**  **The scientific name for humans is *Homo sapien*. Will this ever change? Explain** | | |
| **Material/**  **Manipulatives** |  | | |
| **Technology Integration** | **Lab tops to do interactive classification lab.** | | |
| **Warm Up** | **Have groups look at pictures and answer the questions about camel, cow and horse hoofs.** | | |
| **Hook/**  **Cultural Connection** |  | | |
| **Me: Modeled** | **We will work through the first mission together as a class. Students will do the steps on their computer as I show them on mine.** | | |
| **We: Shared** | **Sharing out our findings at the end of each mission.** | | |
| **Minute By Minute Assessment** | **Moving through room to answer questions or make corrections.** | | |
| **Few: Guided Practice** |  | | |
| **You: Independent Practice** | **Students will work on the PBS Evolution 101 Missions.** <http://www.pbs.org/wgbh/nova/labs/lab/evolution/> | | |
| **Summary** | **At end of each mission, class will stop and debrief before going on to next mission.** | | |
| **Corrective Instruction** |  | | |
| **What is Going On?** |  | | |

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**Lesson Plan Template**

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| --- | --- | --- | --- |
| **SUBJECT** | **Science** | **GRADE** | **8** |
| **DATE** | **10-22** | **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 is life on Earth Classified?** | | |
| **I Can Statements** | **…….use a cladogram to determine the relationship between species.**  **…….understand how closely organisms are related using their scientific classification** | | |
| **Vocabulary** | **kingdom, phylum, class, order, family, genus, species, cladogram,** | | |
| **H.O.T. Question(s) Higher Order Thinking Questions** | **Why would where a species lives not be a useful piece of information to help classify it?**  **What is the basis of the system of classification?**  **Scientists tell us that our human species contains DNA from a different species, *Homo neanderthalensis*. How could this be possible?**  **The scientific name for humans is *Homo sapien*. Will this ever change? Explain** | | |
| **Material/**  **Manipulatives** | **Order cards, Invertebrate Matching game.** | | |
| **Technology Integration** |  | | |
| **Warm Up** | **Review for quiz on Evolution and Natural Selection with a True/False Group Review.** | | |
| **Hook/**  **Cultural Connection** |  | | |
| **Me: Modeled** | **Provide review information for the quiz on Evolution and Natural Selection** | | |
| **We: Shared** |  | | |
| **Minute By Minute Assessment** | **Moving through room to answer questions or make corrections.** | | |
| **Few: Guided Practice** | **Complete order cards activity and invertebrate activity with group.** | | |
| **You: Independent Practice** |  | | |
| **Summary** |  | | |
| **Corrective Instruction** |  | | |
| **What is Going On?** |  | | |