**University of West Alabama**

**COE**

**5E Lesson Plan**

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| Teacher: S. Crawford \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Date: \_February 21, 2014\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Subject area/course/grade level: Biology 9th grade \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Materials: Computer, Internet access for research purposes and a Web 2.0 resource. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Standards:   1. Sequencing taxa from most inclusive to least inclusive in the classification of living things. 2. Writing scientific names accurately by using binomial nomenclature.   Objectives:   1. Students will demonstrate an understanding of taxonomy by creating a presentation on an organism of their choosing   Differentiation Strategies: Students will be allowed extra time if needed. Students with visual and hearing impairments will be seated in the front of the class for the PowerPoint presentations. If needed, additional accommodations will be made based on the student’s IEP. ­ |

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| **ENGAGEMENT:**  The lesson will begin with a review on the history of classification and taxonomy. Each student will be ask to bring an item up front from either their book bags or around the room for scientific observation. If not already included, living objects such as plants or animals will be added to the collection. Once the objects have been lined up on a table up front, students will be then be grouped into groups of 4 and will determine how they would classify or group the items together. Afterwards, student will be asked: What features did you use to group the objects? What might be the purposes/functions of these features be? |
| **EXPLORATION:**  Students will have a week to make a presentation of the entire classification system of any organism of their choosing. It can be an animal, fungus, plant or bacteria. They will have the choice to use PowerPoint, Glogster, Prezi or any other ONLINE presentation resource. The following classification information about the organism must be included:   1. Domain 2. Kingdom 3. Phylum 4. Class 5. Order 6. Family 7. Genus 8. Species 9. Scientific name 10. Common name 11. Current Population 12. Habitat/Niche 13. Food source 14. Reproduction 15. Endangered/Extinction status 16. Fun/Unique facts about your organism (at least 2) 17. At least 4 pictures of your organism |
| **EXPLANATION:**  Students will be taken to the library twice to work on assignments. The first day is for research and the second is for presentations. All other work must be done on their own time. Students will be graded on neatness creativity as well as the inclusion of all required information outlined above. All resources must be cited. |
| **ELABORATION:**  Input: Students will be shown a model presentation completed by the teacher.  Monitoring: This will occur throughout the duration of the project. Teacher will observe students while they research in the library, redirecting as needed. During the construction of their presentation on the 2nd library day, the teacher will observe students, offering praise for good work and guidance on construction as the need arises.  Check for Understanding: Students will turn in a rough draft of their presentations with all of the information they will input into the PowerPoint after the 1st library day. |
| **EVALUATION:**  Students will present their presentations to the class and answer any questions that may arise. |

References:

Bybee, R.W. et al. (1989). *Science and technology education for the elementary years: Frameworks for curriculum and instruction.* Washington, D.C.: The National Center for Improving Instruction.

Bybee, R. W. (1997). *Achieving Scientific Literacy: From Purposes to Practices.* Oxford: Heinemann.

National Research Council. (1999). *Inquiry and the national science education standards: A guide for teaching and learning.* Washington, D.C.: National Academy Press.

Polman, J.L. (2000). *Designing project-based silence: Connecting learners through guided inquiry.* New York: Teachers College Press.