UNIT OF STUDY

Title: Classification overview	Subject/Course: Biology	Length: 1 week
Topic: Classification and the Diversity of Life (1)	Grade: 10th grade	Designer: Woods

UNIT GOALS AND EXPECTATIONS

IMPORTANT CONCEPTS/UNDERSTANDINGS:
Biological classifications are based on how organisms are related. Organisms are classified into a hierarchy of groups and subgroups based on similarities which reflect their evolutionary relationships. Species is the most fundamental unit of classification.

ESSENTIAL QUESTIONS:
How are organisms grouped based on their similarities and differences?
Can you think of more questions?

STUDENT LEARNING EXPECTATIONS:
CDL.7.B.1 Differentiate among the different domains:
- Bacteria
- Archaea
- Eukarya

CDL.7.B.2 Differentiate the characteristics of the six kingdoms based cell structure, method of obtaining food, cell type, organization, reproduction, and mobility:
- Eubacteria
- Archaea
- Protista
- Fungi
- Plantae
- Animalia

-Compare and contrast the functions of heterotrophs and autotrophs

CDL.7.B.3 Identify the seven major taxonomic categories:
- kingdom
- phylum
- class
- order
- family
- genus
- species

CDL.7.B.4 Classify and name organisms based on their similarities and differences applying taxonomic nomenclature using dichotomous keys
CDL.7.B.5 Investigate Arkansas' biodiversity using appropriate tools and technology

SPECIFIC DECLARATIVE KNOWLEDGE – What I know
Explain how living things are organized for study.
Describe binomial nomenclature.
Explain Linnaeus' system of classification.
Explain how evolutionary relationships are important to classification.
Explain how we can compare very dissimilar organisms.
Name the six kingdoms of life as they are now identified.
Describe the three-domain system of classification.

SPECIFIC PROCEDURAL KNOWLEDGE – What I need to do
Correctly write a scientific name for an organism.
Group organisms based on characteristics other than appearance.
Use a dichotomous key to identify organisms.

UNIT ASSESSMENTS
(Include tasks related to Dimensions 3 and 4 and Bloom's Taxonomy)

How Can a Key be Used to Identify Organisms?" Lab 17-1 - Pairs, Paper Keying
"Making Dichotomous Key" Lab(Pg 474)-Pairs, Paper Keying
Open Response

Traditional Assessments:
Tests
Quizzes

Other Evidence of Learning:
"How Can a Key be Used to Identify Organisms?" Lab Assignment
"Making Dichotomous Key" Lab

ACTIVITIES AND LEARNING EXPERIENCES	Resources
"How Can a Key be Used to Identify Organisms?" Lab 17-1 - Pairs, Paper Keying	Prentice Hall Textbook:

"Making Dichotomous Key" Lab(Pg 474)-Pairs, Paper Keying "Florida Panther" Open Response Powerpoint Vocabulary Strategy Daily Notebook Entries Establish Habits of Mind for Science in Critical Thinking, Creative thinking, and Self Regulated Thinking	Biology Internet Powerpoint Lab Equipment
Career Connections	
Taxonomist	