**Classification Unit**

Start Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_End Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Test Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Unit Objectives:**

1. Differentiate among the different domains: Bacteria, Archaea, Eukarya

2. Differentiate the characterisitics of the six kingdoms: Eubacteria, Archaea, Protista, Fungi, Plantae, Animalia

3. Identify the seven major taxonomic categories: kingdom, phylum, class, order, family, genus, species

4. Classify and name organisms based on their similarities and differences applying taxonomic nomenclature using dichotomous keys

5. Investigate Arkansas’ biodiversity (using appropriate tools and technology—bigger project for this at end of year)

**Pre-assessments:**

Circle the number that best shows how well you understand each topic BEFORE starting any new activities. 1=I have a lot of knowledge, could easily explain and demonstrate understanding; 2= I know something about it, but would need to refresh/review before giving a full explanation or demonstrating understanding;

3=I know little or nothing about the topic, need to spend some/a lot of time to learn about the topic to demonstrate understanding

**Essential Questions:**

1. What are characteristics that differentiate the 3 domains?

2. What are characteristics that differentiate the 6 kingdoms?

3. How and why are organisms classified in different taxonomic categories?

4. How and why is a dichotomy key useful in identifying an organism?

**Vocabulary: (22 words)**

Taxonomy, Taxon, Domain, Kingdom, Phylum, Class, Order, Family, Genus, Species, Binomial nomenclature, Animalia, Archaea, Archaebacteria, Bacteria, Eubacteria, Eukarya, Fungi, Protista, Plantae, Biodiversity, Dichotomous key

**Topics:** \*Review topics—you do not need to write a separate SoUL, but MUST include the information in other SoULs.

\***1**.1 2 3 **Cladograms**—diagram, evolutionary relationships

CHOICES: Cladogram webquest, Read text Ch 18-2 pgs 451-454

**2**. 1 2 3 **Taxonomy**—biodiversity, levels of classification, Carolus Linnaeus, taxon, taxonomy, domain, kingdom, phylum, class, order, family, genus, species, binomial nomenclature, archaea, archaebacteria, eukarya, bacteria, protista, fungi, plantae, animalia

CHOICES: Read text Ch 18 pgs.447-450, pgs. 457-461; Ch 18 outline, Taxonomy Powerpoint from Biology Junction Website, Levels of classification foldable, Classification lab parts 1 & 2, Classification review packet, Microscope inquiry

**3**.1 2 3 **Dichotomous key**—biodiversity, taxonomy, taxon, binomial nomenclature

CHOICES: Read Ch 18 pgs. 462-463, Foldable notes, Dichotomy key practice packet, Alien classification WS, Dichotomous Key Sim lab, continue tree project

**Assessments**:

Vocab quiz

2 SoULS

Foldable

Classification lab (parts 1 & 2)

Dichotomy key Sim lab

Regular Unit test