***BIOLOGY 11 UNIT OUTLINE***

UNIT 4: TAXONOMY

A. Chapter 15: Classification Systems pp. 318-333

*Learning Outcomes:*

*It is expected that students will:*

* apply the Kingdom system of classification to study the diversity of organisms

*Knowledge:*

* principles of taxonomy
	+ taxa
	+ phylogenetic tree and cladogram
	+ dichotomous key
* taxonomy principles for classifying organisms:
	+ binomial nomenclature
* unifying characteristics of the evolutionary continuum across the kingdoms
	+ characteristics of the three domains Archaea, Bacteria, Eukarya
	+ characteristics of the kingdoms Archaebacteria, Eubacteria, Protista, Fungi, Plantae, and Animalia

*Vocabulary:*

Animalia, Archaebacteria, binomial nomenclature, biochemical relationship, cladogram, class, dichotomous key, embryological relationship, Eubacteria, eukaryotic cell, family, Fungi, genus, homologous structure, Monera, kingdom, order, phylogenetic tree, phylum, Plantae, prokaryotic cell, Protista, species, taxonomy, taxon



**Taxonomy (Classification) Test Outline**

*Reading:* Ch.15 pp.318-333

*Concepts to study:*

\_\_\_\_\_ 1. Explain why we classify organisms.

\_\_\_\_\_ 2. What language is used in classification?

\_\_\_\_\_ 3. Explain what is used to help classify organisms.

\_\_\_\_\_ 4. Who developed binomial nomenclature?

\_\_\_\_\_ 5. Describe how you properly use binomial nomenclature.

\_\_\_\_\_ 6. Recognize proper binomial nomenclature

\_\_\_\_\_ 7. Name the 8 taxa in order from smallest to largest or most general to most specific.

\_\_\_\_\_ 8. Know a human being’s complete taxonomic classification.

\_\_\_\_\_ 9. Be able to distinguish which organisms are more closely related by their classification.

\_\_\_\_\_ 10. Distinguish between prokaryotic & eukaryotic cells.

\_\_\_\_\_ 11. Distinguish between the 3 domains of life & give examples in each.

\_\_\_\_\_ 12. Distinguish between the 6 kingdoms of life & give examples within each.

\_\_\_\_\_ 13. Give similarities & differences between the 6 kingdoms.

\_\_\_\_\_ 14. Given descriptors, be able to distinguish which kingdom the unknown organism belongs.

\_\_\_\_\_ 15. Explain what a dichotomous key, a phylogenetic tree, and a cladogram is.

\_\_\_\_\_ 16. Be able to use a dichotomous key, a phylogenetic tree, and a cladogram.

\_\_\_\_\_ 17. Be able to design a small dichotomous key and a cladogram.

*You should also:*

* read the assigned reading
* go through your notes
* know your vocabulary (on the course outline & new words in your notes)
* review your textbook questions & worksheets
* ask questions