Objective Sheet: Unit 1 (Part 1)

**Tested Objectives**

STERNGRR

Bio 2.1.2

* Analyze how various organisms accomplish life functions through adaptations within particular environments (example: water or land) to ensure survival and reproductive success.
* Relate prior understanding of survival and reproductive success to evidence of variations observed in species three areas:
* *structural adaptations –* nutrition, respiration, transport and excretion mechanisms,
* *reproductive adaptations* – sexual vs. asexual, eggs, seeds, spores, placental, types of fertilization (internal and external)

Classification

Bio.3.5.1

• Generalize the changing nature of classification based on new knowledge generated by research on evolutionary relationships and the history of classification system.

Bio.3.5.2

• Classify organisms using a dichotomous key.

• Compare organisms on a phylogenetic tree in terms of relatedness and time of appearance in geologic history.

**Essential Vocabulary**

Synthesis, transport, excretion, respiration, nutrition, growth/development, reproduction, regulation, homeostasis, Domain, kingdom, phylum, class, order, family, genus, species, taxa, binominal nomenclature, dichotomous key

**Statements to Master**

1. Provide a simple description for each of the STERNGRR life processes.
2. Identify the STERNGRR life process being described. (PowerPoint)
3. Provide examples for each of the STERNGRR life processes.
4. Explain the historical development of classification systems that moved from a 2 to 5 to 6 kingdom system of categorizing organisms
5. Identify the 6 kingdoms of living organisms and provide examples of organisms in each
6. Describe the 7 level (taxa) classification system for living organisms, including the progression from general to specific and the relationship of the levels to each other
7. Compare the 7 taxa classification scheme of different organisms in order to determine which are most closely related
8. Recognize an organism’s scientific name and identify that organism’s genus and species (Practice Problems)
9. Use a dichotomous key to identify an organism (Practice Problems)

**Practice Problem**





 