**Classification and Viruses Study Guide**

**1st period: Thursday, April 20**

1. Know the taxonomic classification system. (Fill in the Blanks)
   1. D\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Archae, Bacteria, Eukarya) 🡨 Least Specific
   2. K\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Archaebacteria, Eubacteria, Animalia, Plantae,

Protista, Fungi)

* 1. P\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  2. C\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  3. O\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  4. F\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  5. G\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  6. S\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_🡨 Most specific

1. As you go down the taxonomic classification system the numbers increase. For example, there are only \_\_\_\_\_\_\_\_ domains but there a millions and millions of species. Therefore, you should be able to say that there are (circle one: more/fewer) classes than there are phyla (plural of phylum).
2. The more taxonomic levels two organisms have in common the (circle one: more/less) closely they are related.
3. What two taxonomic levels are used in a scientific name?
4. Know how to use a dichotomous key.
5. What is an aerobic organism vs. anaerobic organism?
6. Which organisms can do photosynthesis? Is it just plants?
7. Which kingdoms include photosynthetic organisms?
8. What types of organisms are found in deep thermal vents, thermal pools in Yellowstone, etc (extremophiles?).
9. What is the difference between autotrophic and heterotrophic?
10. Compare and contrast prokaryotes and eukaryotes.
11. What parts of the cell do BOTH prokaryotes and eukaryotes have?
12. Are fungi autotrophs or heterotrophs?
13. Which kingdoms can have a cell wall?

Viruses

1. What type of pathogen causes AIDS?
2. Why are viruses not considered alive?
3. What features do all viruses have?
4. What is the difference between the lysogenic and lytic cycle of viral replication?
5. Can antibiotics be used to treat viral infections?
6. Is smallpox a virus or bacteria?
7. Is influenza a virus or bacteria?
8. True or false: The genome of a virus can be either DNA or RNA.