Bio 1
Review Sheet: Viruses, Bacteria, Protists, and Fungi

Viruses

1. List the major components that make up a virus
2. Viruses are said to be site specific. Explain what this means?
3. Explain the lytic cycle and lysogenic cycle of the bacteriophages. How do they differ?
4. Some viruses enter cells through the process of phagocytosis. Explain how this is done. Is the cell destroyed in this process?
5. Describe the process of reverse transcription. How is it different from the cycles listed above?
6. Viruses are completely dependent on their host cells. This statement can be explained by the following: viral DNA→ mRNA → proteins. What does this mean? What is the purpose of the proteins produced in this process?

Bacteria

1. What are the 2 bacterial kingdoms? What is the difference between them? What kingdom was split to make these 2 kingdoms?
2. List the 3 basic shapes of bacteria
3. Explain asexual and sexual reproduction in bacteria.
4. Illustrate a bacterial cell. Include the following parts: genetic material, ribosomes, plasma membrane, cell wall, capsule, pilus flagella. What is the function of each of these structures?
5. Bacteria can be autotrophic. Provide and explain 2 examples
6. Bacterial can also be heterotrophic. Provide and explain 3 examples.
7. List and explain the 3 main groups of Archaebacteria.

Protista

1. Fill in the chart below with the appropriate information.
2. Animal-like protists (protozoa) re classified based on their means of locomotion. Describe this for each.
3. *Euglena* is a hard organism to classify. Why?

Fungi

1. List some reasons why fungi cannot be placed in the plant kingdom.
2. Describe the structure of fungus. Be sure to include the following terms: hyphae, mycelium, chitin, septa.
3. Explain how fungi obtain their nutrients.
4. Differentiate the following terms: saprophytic, parasititc, and mutualsitic. Provide an example of each.
5. Explain 2 types of asexual reproduction in fungi
6. Give a general description of sexual reproduction in fungus. Include the following terms: haploid, diploid, zygote, and spores.
7. A perfect example of mutualsitic relationship in the Fungi kingdom in lichens. Explain this relationship?
8. Kingdom Fungi is made up of 4 Divisions: Zygomycota, Ascomycota, Basidiomycota, Deuteromycota. What is the difference between these 4 divisions? Provide examples of each.

Kingdoms-Review

Fill in the table with the appropriate information:

Kingdom	Prokarytoc/Eukaryotic	Unicellular/Multicellular	Autotroph/Heterotroph	Example

Kingdom Protista-General Information

Phylum	Animal, Plant or Fungus Like	Unicellular/ Multicellular	Habitat	Autotroph/Heterotroph	Method Feeding	Structure
Ciliophora: Paramecium						
Mastigophora: Flagellates						
Sarcodina: Amoeba						
Sporozoa						
Euglenophyta: Euglena						
Pyrrophyta: dinoflagellates						
Chrysophyta: Diatom						
Chlorophyta: green algae						
Rhodophyta: Red algae						
Phaeophytal : Brown algae						
Myxomycota:						

Plasmodial/ Cellular slime molds						
Oomycota: Water molds and Downy mildews						