

**Study Guide Bacteria, Viruses, Protists, and Fungi**

**100 Pts**

MC 40 Questions x 2 = 80 Points

1 Written Response question worth 20 Points.

10 Extra Credit Fill in May come from reading or class material 10 Points

**Study Materials:**

**Holt Modern Biology Chapter Ch24-28**

Bacteria PowerPoint

Viruses PowerPoint

Bacterial DNA exchange PowerPoint

Worksheets The World of Fungi & The World of Protists

Questions can come from online questions see website HOLT your text or the above materials

**How does structure relate to function in bacteria?**

Bacteria are single celled prokaryotic organisms and can be classified as Eubacteria or

Archaeobacteria

Bacteria have detailed structural characteristics, know basic cell structure

Bacteria can get energy in a variety of environments

Bacteria have three methods of genetic recombination

Transformation, Conjugation, Transduction SEE PowerPoint

Bacteria can be both helpful and harmful to humans

**How do viruses interact with living things?**

Viral structure relates to function

Replication by viruses occurs by either the lytic cycle or lysogenic cycle

Vaccination and drug therapy attempt to control the spread of viral diseases

**What ecological roles do protists play and what distinguishes them from other eukaryotes?**

**Know basic characteristics of each type of protist such as movement, how they obtain food etc.**

Protozoa are animal-like protists

Algae are plant-like protists

Slime molds are fungus-like protists

Know the significance of algal blooms and how they can cause dead lakes

**What ecological roles do fungi play and what distinguishes them from other eukaryotes?**

Distinct structures allow fungi to grow, reproduce, and take in nutrients

Mycorrhizae (will be mentioned during plants) and lichens are symbiotic relationships that involve fungi

Fungi can be both helpful and harmful to humans