

SBI3U Mini Test 2 Unit 1

1. Prokaryotes are found in few habitats on Earth __F__
Prokaryotes are found in many habitats
2. Bacteria that cannot live in environments with oxygen are considered Facultative anaerobes. _F

3. The capsule of a protein surrounding a virus is called a capsid. T

4. Most species of viruses can infect only a single host species. _T

5. Malaria is an example of a disease caused by a bacteriophage. _F
_____ Protist _____
6. Blue-Green algae is a photosynthetic protist. F
_____ Bacteria _____
7. A halophile is an example of a eubacteria. F
_____ Archaea _____
8. Conjugation is a process involved in the asexual reproduction of unicellular protists. __F
_____ bacteria
9. The key difference between Lytic and Lysogenic cycle that during the Lytic cycle the bacteriophage is not active. F
_____ Lysogenic cycle _____

Label the following Diagram:

Short Answer:

1. List any 3 Plant-like protists.
Red dinoflagellates, diatoms, dinoflagellates, euglena, Green algae
2. Why is the Protist Kingdom considered the 'junk drawer' of kingdoms?
Scientist use this Kingdom to classify organisms that don't fit into any of the other kingdoms (animalia, Plants, Archaea, Eubacteria and Fungi) . It is called the junk drawer, because it is where organisms are placed when they don't belong anywhere else.
3. Malaria is a disease in humans that causes more than a million deaths a year.
 - a. Identify the specific protist that causes malaria
Plasmodium sp.
 - b. How is malaria spread?
Through mosquitos

c. Briefly describe the lifecycle (use point form)

(see your diagram handout from class)

4. What is transduction? Explain where/when it occurs during the Lysogenic cycle. (You may include a sketch in your answer)

Transduction is a process of genetic exchange. It occurs when a virus inserts its DNA into a bacteria, thus making it a bacteriophage. The bacteriophage undergoes the Lysogenic cycle.

Part 3: Fill in the Blanks /10:

Gram Positive	Gram Staining	Chlamydia	Lipopolysaccharide	Cyanobacteria	nucleus	DNA
Gram Negative	Meningitis	Peptidoglycan	Proteobacteria	eukaryotes	prokaryotes	organelles

Bacteria are Prokaryotes that contain no organelles and no nucleus. Bacterial cell walls contain a compound composed of peptidoglycan which is useful for scientists when using a gram staining. Bacteria that stain pink are called gram negative whereas bacteria that stain purple are called gram positive. A group of gram positive bacteria can be useful for humans such as when used in yogurt, or can be harmful such as when causing meningitis. Another group of bacteria that causes a disease known as the Bubonic plague is called proteobacteria.