

Microbiology Review

Name: _____

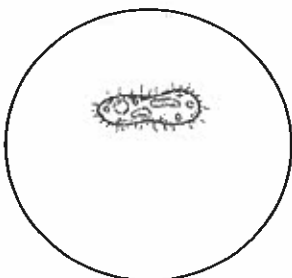
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Vocabulary you should know

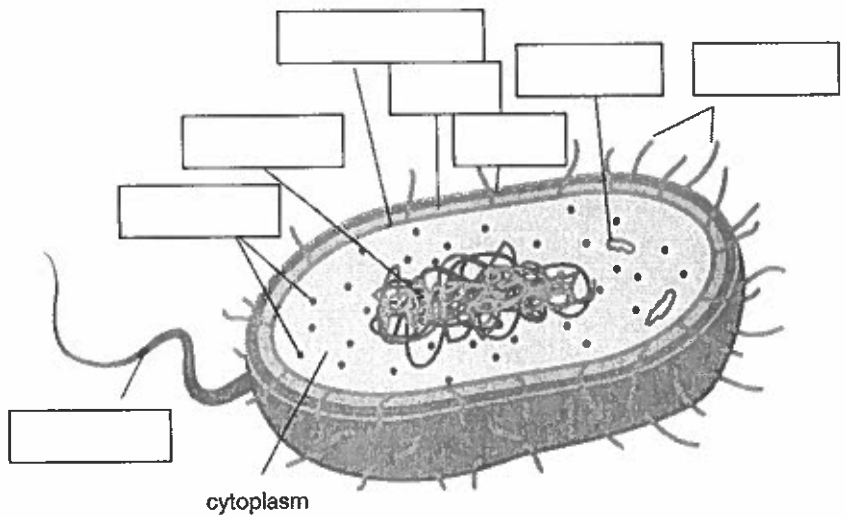
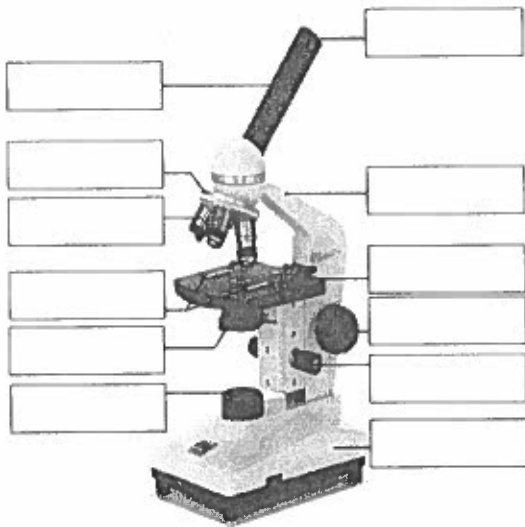
Prokaryote	Pilus (Pilli)	Methanogen	Spirillum	Photoautotroph	Nitrogen-fixing
Eukaryote	Flagellum (Flagella)	Halophile	Diplo-	Chemoautotroph	Sex
Bacteria	Nucleoid	Thermophile	Strepto-	Heterotroph	Reproduction
Archeae	Capsule	Coccus	Staphylo-	Decomposer	Binary fission
Monera	Plasmid	Bacillus	Autotroph	Pathogen	Conjugation
					Transformation
					Transduction
Capsid	Base Plate	Protein Sheath	Tail Fibre	Spike	Collar
Aerobic	Anaerobic				

Questions you should be able to answer

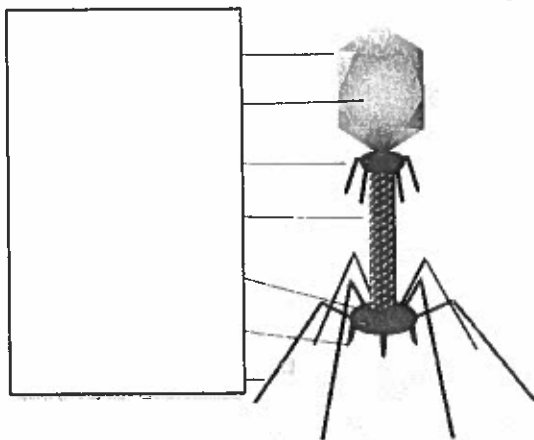
1. What are the 3 domains of life and give an example of each?
2. Compare and contrast prokaryotes and eukaryotes?
3. Compare and contrast archaea and bacteria?
4. What are the 3 types of archaea? Describe each of them briefly.
5. What are 3 ways that bacteria benefit us?
6. How do bacteria have sex?
7. How do bacteria reproduce?
8. What's the purpose of a capsule?
9. Which types of archaea are aerobic and which are anaerobic?
10. How do bacteria obtain their energy?
11. How can bacteria be categorized into different groups?
12. What are the 3 types of bacterial shapes and growths?
13. What is the order of chemicals/dyes in a Gram Stain procedure?
 - a. What do each of the chemicals do in a Gram Stain procedure?
14. What magnification is the ocular lens?
15. What magnification are the objective lenses?
16. What is the total magnification under low, medium, and high powers?
17. What characteristics make viruses living? What characteristics make them non-living?
18. What are the steps of viral attack in a lytic cycle?
 - a. What are the steps of viral attach in the lysogenic life cycle?
19. How do vaccinations work?
20. What are the different body's defenses against invaders?
21. Why do people get "sick" (runny nose, sneeze, cough, vomit etc.)
22. Why do you not get "sick" by the same virus?
23. How do viruses pick their host cell?
24. What kind of cells eat and destroy viruses?
25. Calculate the actual size of the following specimen under medium power.



Diagrams



Structure of bacteriophage



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