

1. Review the last study guide. You don't get to forget what you already learned.
2. Work on those metric conversions. There will be another conversion question on the quiz.
3. What are all of the bacterial morphologies?
4. What is the size range of bacteria?
5. What's the function of a membrane?
6. Draw and describe a cell membrane in detail.
7. Name two cell structures unique to Eukarya.
8. What is the function of a mitochondria?
9. What is the endosymbiotic theory and what evidence supports it?
- 10. What are the differences between a Gram positive and Gram negative bacterium?**
11. Describe the structure and subunits of a bacterial cell wall.
12. What is the periplasmic space?
13. What is the outer membrane and its importance.
14. Name the types of flagellar arrangements.
15. What is chemotaxis?
16. Which way do flagella rotate during runs and tumbles?
17. What's the difference between pili and fimbriae?
18. What is a magnetosome?
19. What is an inclusion body?
20. What is an endospore and its function?
21. Describe a bacterial chromosome.
22. What is the structure of an atom (the subatomic particles)?
23. What is an element, compound and an ion?
24. What are the 6 major elements comprising life?
25. What is an organic compound?
26. Can you recognize a sugar by its name? Name a monosaccharide, a disaccharide, two polysaccharides and what distinguishes them.
27. Proteins are made of what monomers?
28. How many commonly occurring protein monomers are there?
29. What are the functions of proteins?
30. The cell membrane is made of what macromolecule? Its basic structure has three parts, what are they?
31. What is DNA? What is the basic structure of DNA? What sugar is DNA made of?
32. What are the monomers of DNA?
33. What is RNA? What is the basic structure of RNA? What sugar is RNA made of?
34. What are the monomers of RNA?
35. What are the differences between DNA and RNA?
36. How are DNA, genes, chromosomes and genomes related?
37. What does it mean to say that DNA strands are antiparallel, and complementary, and form a double helix?