SELF QUIZ—VIRUSES

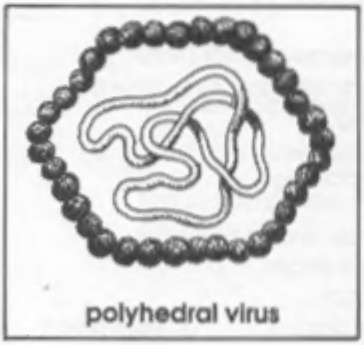
Name _____

Fill in the blanks from the word list below.

AIDS	*antibodies*	*cells*	*interferon*
measles	*mumps*	*protein*	*reproduction*
	vaccines	*weakened*	

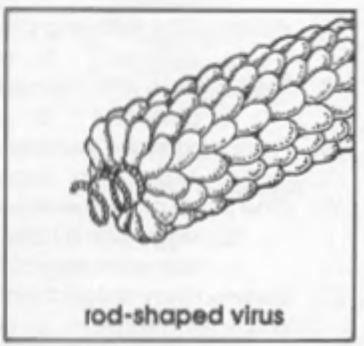
1. Viruses consist of nucleic acids covered by a coat of _____ .
2. Viruses, unlike bacteria, are not composed of _____ .
3. The only life function viruses can perform is _____ .
4. Protection against some viral diseases can be produced by _____ .
5. Name three viral diseases: _____ , _____ and _____ .
6. A vaccine is made from a _____ form of the virus.
7. Two natural defenses the body has against viruses are _____ and _____ .

Below are diagrams of three different types of viruses. Label the nucleic acid and protein coat in the polyhedral and rod-shaped viruses. Label the capsid, collar, tail sheath, tail fiber and base plate in the bacteriophage.



polyhedral virus

bacteriophage



rod-shaped virus

BACTERIA—TYPICAL MONERANS

Name _____

Structure of Bacteria

Label the parts of a moneran on the diagram below. State the function/purpose of each.

a. flagella _____

b. ribosomes _____

c. nucleoid _____

_____

d. cell wall _____

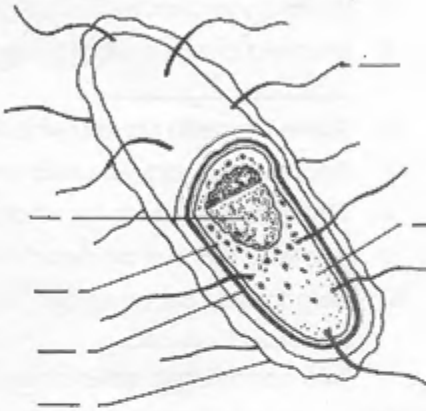
_____

e. cell (plasma) membrane _____

_____

f. capsule _____

_____



Conjugation in Bacteria

The diagrams below show conjugation, a means of genetic transfer but not reproduction in bacteria. During conjugation, a plasmid is transferred from a donor to a recipient bacterium. Label the donor bacterium, the recipient bacterium, the plasmid and the cytoplasmic bridge on the diagrams.

Answer the questions below.

1. By what process do bacteria reproduce?

   _____

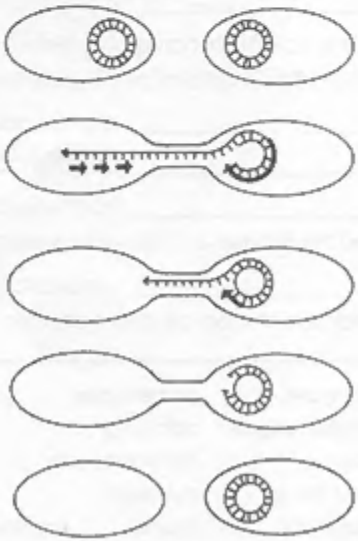
2. What structures do some bacteria form under unfavorable conditions?

   _____

3. What do the monerans lack in their cell structure that is present in most other organisms? _____

4. Are the monerans prokaryotic or eukaryotic?

   _____



SELF QUIZ—MONERANS

Name _____

Put the correct answer to the questions in the blanks using the words from the list below.

1. Monerans have no definite _____ , but can still carry on reproduction.
2. Monerans have no _____ , but can still carry on cellular respiration.
3. Cyanobacteria may also be called _____ .
4. When cyanobacterial multiply rapidly in a pond, they use up all the _____ .
5. Bacteria come in what three shapes? _____ , _____ , _____
6. Some bacteria have a whiplike tail called a _____ .
7. Bacteria that do not need oxygen to live are called _____ .
8. Bacteria reproduce by what process? _____
9. Bacteria that live on dead organic matter are called _____ .
10. Relationship between two organisms that do not harm either one is _____
11. Two conditions bacteria need to live: _____ , _____
12. Four ways we have of controlling bacterial growth. _____
13. _____ are the oldest known and simplest organism.
14. _____ bacteria live in nodules on the roots of plants, fixing atmospheric nitrogen, thus making it available for their own metabolic activities.
15. _____ is the most important source of variability in bacteria.
16. Many scientists have suggested that _____ should be considered a separate kingdom because they are remarkably different from all the bacteria.
17. _____ are the source of a majority, over 2000 kinds, of antibiotics.
18. _____ are the causative agents of syphilis and Lyme disease.
19. _____ bacteria depend on chemical sources—ammonia, methane and hydrogen sulfide—for energy for their metabolism.
20. _____ were probably responsible for the accumulation of limestone deposits known as stromatolites.

actinomycetes	*anaerobes*	*archaebacteria*	*binary fission*	*bacteria*	
blue-green algae	*canning*	*chemosynthetic*	*cyanobactyeria*	*flagellum*	
freezing	*mitochondria*	*moisture*	*mutation*	*mutualism*	
nitrogen fixing	*nucleus*	*oxygen*	*proper temperature*	*radiation*	
refrigeration	*round*	*rodlike*	*saprophytes*	*spiral*	*spirochetes*