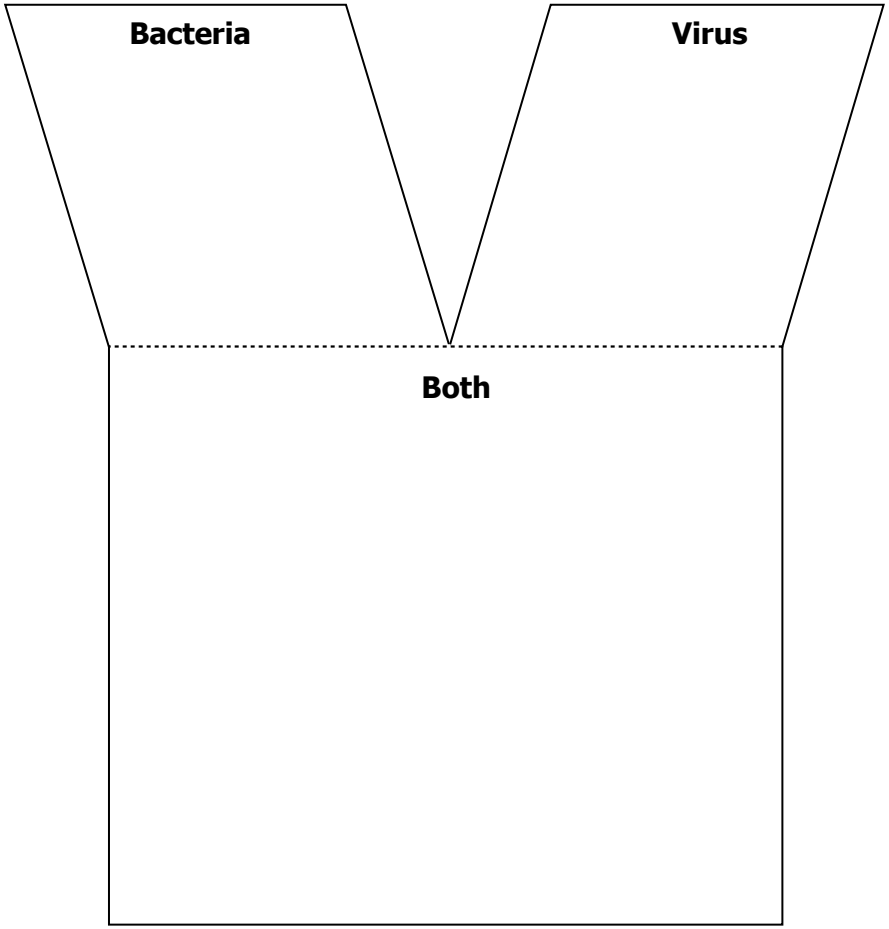
Complete the diagram below using these 17 terms:

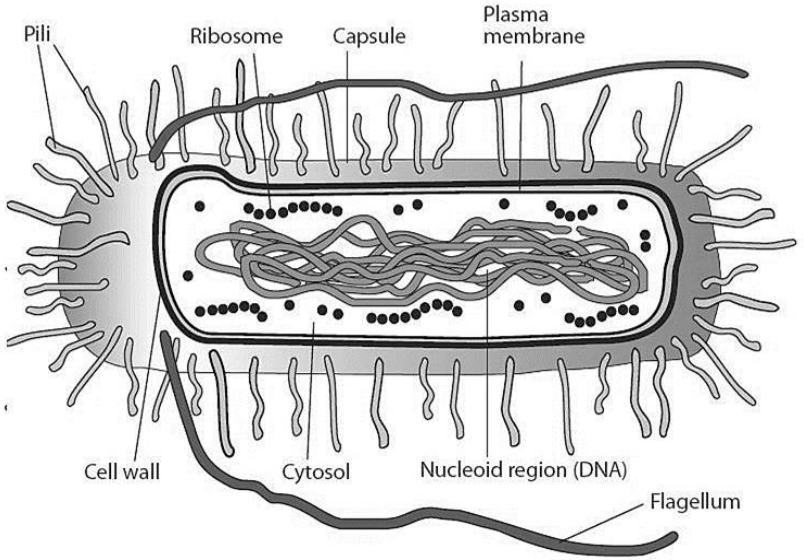
1. Cell wall
2. Smaller of two
3. Larger of two
4. Causes disease
5. Living organism
6. Not living
7. Affected by antibiotics
8. Has protein coat
9. Lytic cycle
10. Lysogenic cycle
11. Cannot reproduce alone
12. Can reproduce
13. Contains genetic material
14. AIDS
15. Tetanus
16. Strep throat
17. Influenza



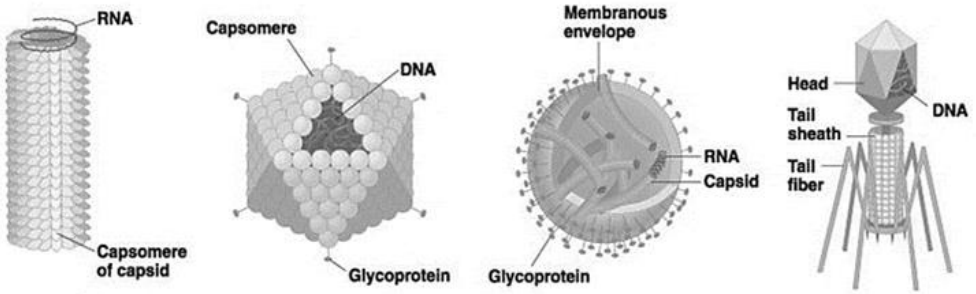
Chapter 18

Bacteria & Virus

(Bacteria = Living)



(Virus = Non-Living)



Vocabulary:

1. Bacteria	
2. Nucleoid	
3. Capsule	
4. Pilus	
5. Binary fission	
6. Heterotrophs	
7. Photoautotrophs	
8. Chemoautotrophs	
9. Endospore	
10. Bacteriophage (device)	
11. Capsid	
12. Vector	

Category	Bacterial Disease (pg. 524)
Sexually Transmitted diseases	
Respiratory diseases	
Skin diseases	
Digestive tract diseases	
Nervous system diseases	
Other diseases	

Category	Viral Disease (pg. 525)
Sexually Transmitted diseases	
Childhood Diseases	
Respiratory Diseases	
Skin Disease	
Digestive tract Diseases	
Nervous system Disease	
Other Diseases	

III. Diseases Caused by Bacteria & Viruses (11C)

32. What is a pathogen? (pg. 1076)

33. What two ways do bacteria cause a disease? (pg.524)

34. List 3 ways to bacteria (prokaryotes) metabolize. (pg. 520-521)
    a)

    b)

    c)

35. What is a prion and what is its shape? (pg. 531)

36. How are bacterial infection treated? (pg. 1082)

37. How are viral infections treated? (pg. 1089)

I. Bacteria (4A, 4B, 4C, 8A, 8C)

13. What makes bacteria prokaryotic? (pg. 516)

14. **Compare** Archae and Eubacteria.

	ARCHAEBACTERIA	**EUBACTERIA**
Size (pg. 517)		
Cell wall (pg. 517)		
Where they live (pg. 517)		

15. What is the pili used for? (pg. 518)

16. **Draw** the Bacteria shape and arrangement (pg. 519)

Bacilli	**Cocci**	**Spirillum**
Diplo	**Staph**	**Strep**

18. How do bacteria (prokaryotes) move?

Draw, color, and label the bacterium on page 518

19. How now can prokaryotes be identified? (pg. 519)

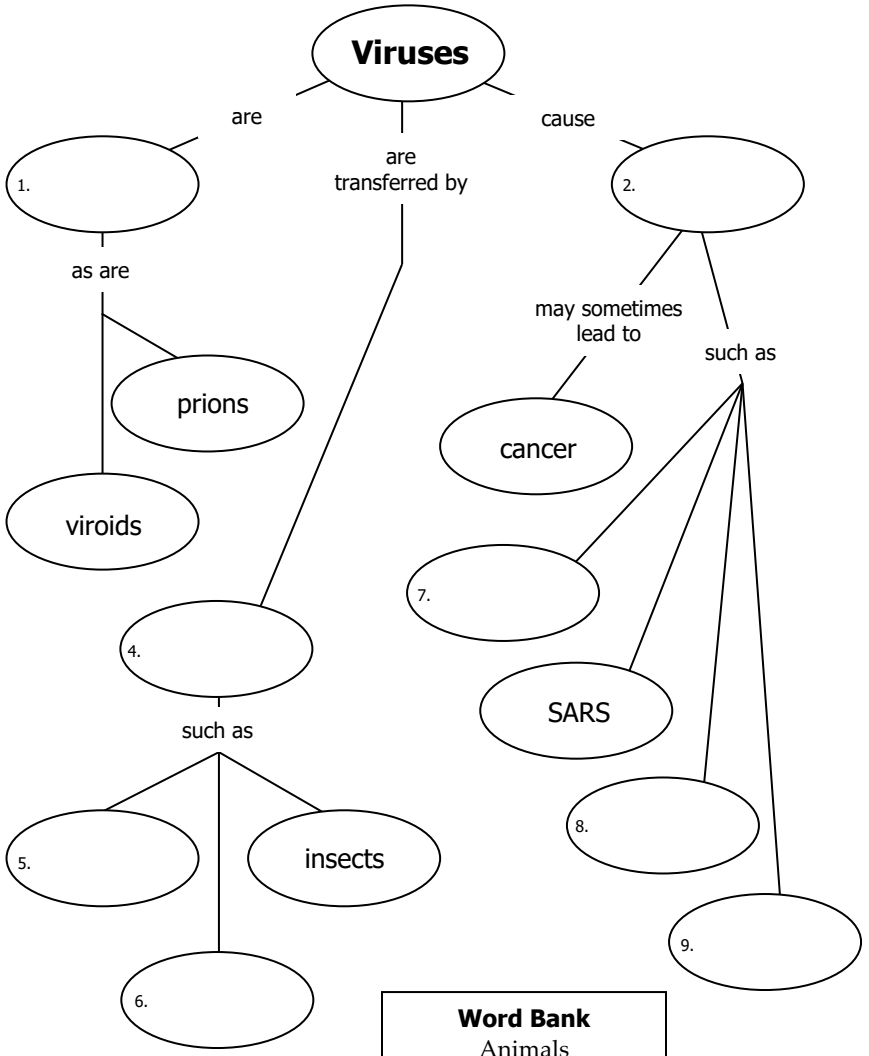
By comparing _____, evolutionally _____ can be determined. Historically, scientists identified prokaryotes by which three types of criteria:

a)

b)

c)

Virus Concept Map



Word Bank

Animals
Chickenpox
Flu
Humans
Lifeless particles
Measles
Vectors
Viral diseases

30. **Describe** the **LYSOGENIC CYCLE**. (Viral reproduction). (pg. 528)

31. What is a retrovirus; and what does it cause? (pg. 530)

In the space below, draw and label a retrovirus (pg. 530)

20. Reproduction (pg. 520)

	PROCESS	**RESULT**
Binary Fission		
Conjugation		

21. **Define** obligate anaerobes, facultative anaerobes and obligate aerobes (pg. 520)

22. Importance of Bacteria (pg. 522-523)
- Decomposers –
- Nitrogen Fixers –
    a) List uses for root nodules.
- Human Uses (Normal flora, Foods and Medicines) –

II. Virus (4A, 4B, 4C, 8A, 8C)

23. What is a virus? (pg. 525)

24. What is a Capsid?

25. Are viruses alive? Why or why not? (pg.525)

26. **Draw and label** the four viruses on page 526-527

27. What is a virus composed of? (pg. 526 look at the different types)

28. How does a virus attach to a cell? Do all viruses have the same attachment mechanism? Why or Why not. (pg. 527)

29. **Label** the steps of the lytic cycle on the diagram below. Use the following terms:

Assembly, Attachment, Entry, Lysis & Release, Replication