Biology Chapter 19: Homework

Hmwrk 19-1
1. What are the differences between eubacteria and archaebacteria?
2. What characteristics help to identify prokaryotes?
3. What are the differences between chemotrophs, photoherterotrophs, photoautrophs, and chemoautotrophs?
4. What is the difference between obligate and facultative?
5. What are the three modes of growth and reproduction in bacteria?
6. Why are bacteria important?

Hmwrk 19-2
1. What are viruses?
2. Describe the basic structure of a virus.
3. Describe a lytic infection and how it infects.
4. Describe a lysogenic infection and how it infects?
5. What are retroviruses? Give an example of a retrovirus.

Hmwrk 19-3
1. What are pathogens?
2. What are the two ways that bacteria can produce disease?
3. What are the two ways that bacterial diseases can be prevented? Describe in detail.
4. What methods are available to control bacteria?
5. What are viroids and prions?

Biology Chapter 19: Study Guide

Section 1

- Vocabulary

Prokaryote	Photoautotroph	Binary fission
Bacillus coccus	Chemoautotroph	Conjugation
Spirillum	Obligate aerobe	Endospore
Chemoheterotroph	Obligate anaerobe	Nitrogen fixation
Photoheterotroph	Facultative anaerobe	

- Know what prokaryotes are and how they are classified
- Know the differences between eubacteria and archaebacteria
- Know the characteristics that are used to identify prokaryotes
- Know the different shapes of bacteria
- Know what Gram staining is and its importance
- Know the methods of locomotion in bacteria
- Know the differences between autotroph and heterotrophs and the subgroups
- Know the difference between obligate and facultative
- Know the different methods to release energy within the bacterium cell
- Know the three methods of growth and reproduction in bacteria
- Know the importance of bacteria as decomposers, nitrogen fixers and for human use

Section 2

- Vocabulary

Virus	Lytic infection	Retrovirus
Capsid	Lysogenic infection	
Bacteriophage	Prophage	

- Know what viruses are
- Know who Wendell Stanley is and what he did
- Know the basic viral structure
- Know the two processes of infection of a host cell by a virus
- Know what happens to the host cell after the infection by a virus
- Know what a retrovirus is and an example of one
- Know what characteristics viruses have in common with living things
- Be able to describe why viruses must have evolved after other living things

Section 3

- Vocabulary

Pathogen	Antibiotic	Prion
Vaccine	Viroid	

- Know what a pathogen is
- Know the two ways in which bacteria produce disease
- Know the two ways in which bacteria can be prevented
- Know the diseases caused by bacteria and viruses in animals, plants and humans
- Know how bacterial growth can be controlled
- Know what viroids and prions are and what they do and who Stanley Prusiner is