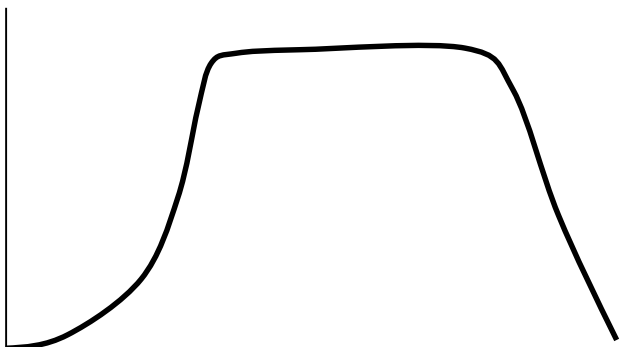


Write the answers on your own paper, not on this sheet.

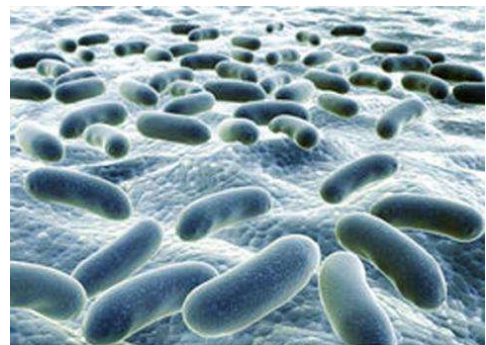
1. The kingdom Monera used to contain all bacteria, but it has been split into two domains. What are the two domain names and what goes in each domain?
2. Bacteria are prokaryotic. What does “prokaryotic” mean?
3. List three examples of non-pathogenic bacteria.
4. Copy the diagram in Figure 2.1 on page 38. Include the labels.
5. Match the term with its correct definition:

a. Capsule	1. Hold the shape of the bacterium, controls water in/out
b. Cell wall	2. Sticky layer that allows the bacterium to adhere to things
c. Plasma membrane	3. Regulates what goes in/out of the bacterium
6. What do ribosomes do?
7. What are fimbriae and what do they do?
8. List the three parts of the flagellum.
9. Are most bacteria producers, consumers, or decomposers?
10. What is the difference between a saprophyte and a parasite?
11. What are the two ways that autotrophic bacteria make their own food?
12. If an organism uses oxygen, is it aerobic or anaerobic?
13. Binary fission is the most common way bacteria reproduce. Look at Figure 2.4 on page 45. Write a short summary of each step of binary fission.
14. Copy the population graph shown below and label these phases: exponential growth, decline, steady state. Which two of these phases make up logistic growth?
15. What is a plasmid?
16. Match the term with its correct definition:

a. Conjugation	1. A living bacterium takes DNA information from a dead bacterium.
b. Transformation	2. A virus “hijacks” a bacterium and produces altered DNA.
c. Transduction	3. Two living bacteria exchange DNA information.
17. Why would a bacterium form an endospore?



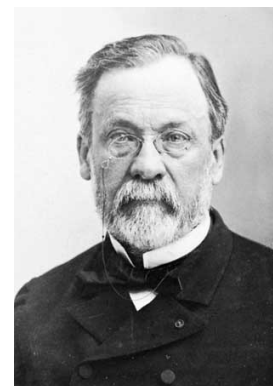
Graph for problems 14



Bacteria on Food

Write the answers on your own paper, not on this sheet.

1. List the biological name for each shape of bacteria:
 - a. Round
 - b. Rod-shaped
 - c. Helical
2. Name one difference between diplococcus bacteria and diplobacillus bacteria.
3. Name one difference between diplococcus and streptococcus bacteria.
4. Who was Dr. Hans Christian Gram and what did he do that was important?
5. List the four Phyla in Kingdom Monera.
6. List the phylum and class of each bacterium described:
 - a. It is Gram stained blue and it is rod-shaped.
 - b. It won't accept any Gram stain and it lives in pond water.
 - c. It is Gram stained red and it produces oxygen.
 - d. It is Gram negative and doesn't do photosynthesis.
 - e. It lives in the extremely salty Dead Sea.
 - f. It is photosynthetic, but it doesn't produce oxygen.
7. Name the pathogenic bacteria that causes each disease:
 - a. Lyme disease
 - b. Pneumonia
 - c. Food poisoning
8. Why is "Blue Green Algae" an incorrect name for this organism? What is its correct name?
9. What kind of foods do you have to eat to get Salmonella?
10. List the five conditions needed for bacterial growth.
11. Look this up online: Who was Louis Pasteur? What did he discover? How did he make your food safer to eat?



Louis Pasteur