Section 1.4 Asexual Reproduction in Bacteria, Protists, Fungi, and Animals

1) Define asexual reproduction.

2) How do bacteria reproduce?

3) Define binary fission.

4) How are bacteria cells different from the cells that you have been studying?

5) Suppose you get on a bus to go to school. At 8:20 A.M., you yawn, and a single Streptococcus bacterium drifts into your open mouth and settles in your throat. Under ideal conditions, a single bacterium can reproduce in 20 minutes. So, by the time the bus drops you off at Clifford School at 8:40 A.M., there are two bacteria in your throat. When you arrive in Mr. Riediger's class at 9:00 A.M., there are four.

a) Assume that the bacteria continue to reproduce asexually every 20 minutes. How many bacteria will be in your throat by: (i) – 12:00 noon; (ii) at the end of the school day (3:20 P.M.); (iii) – supper time (6:00 P.M.); (iv) bedtime (10:00 P.M.)?

b) Make a graph showing the growth of the Streptococcus population in your throat.
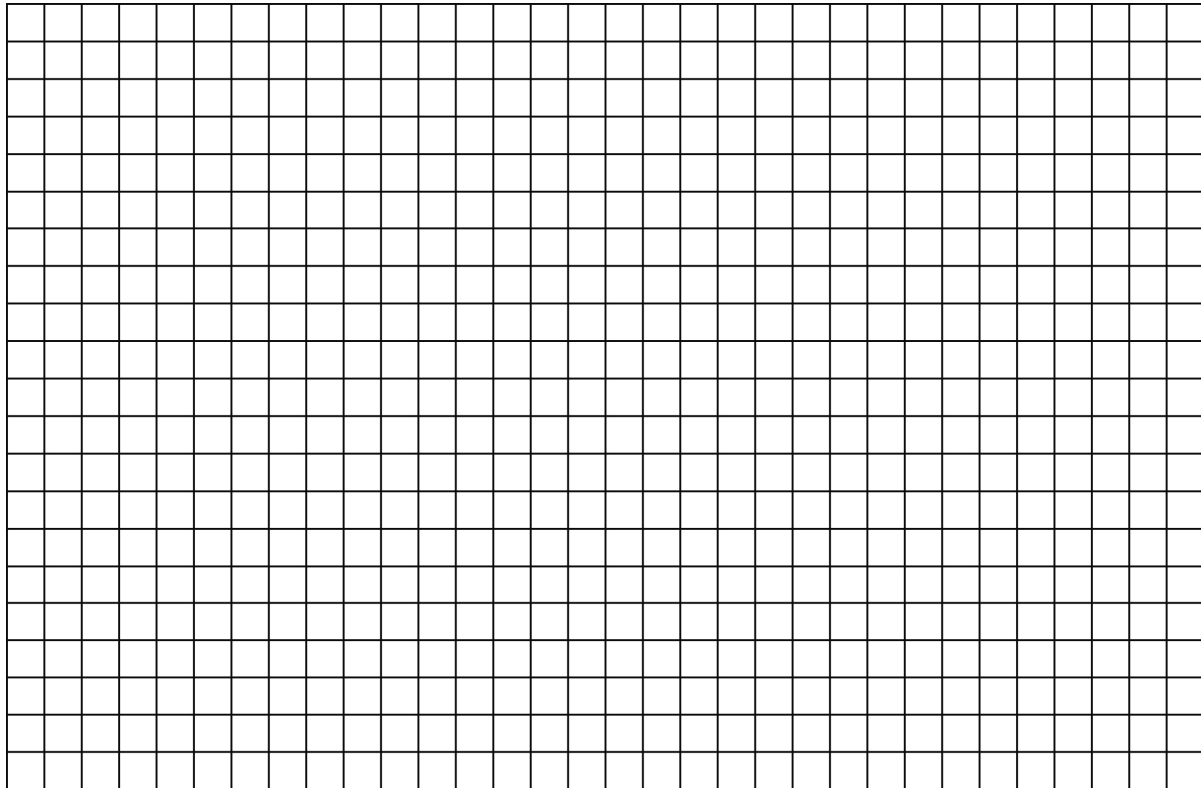
c) Do you think the bacteria can keep multiplying in this way indefinitely (forever)?

d) At what time do you think your throat may feel sore? How many bacteria will be present in your throat?

6) Why are protists important?

7) What are the three methods that fungi use to reproduce asexually?

8) Define fragmentation.

9) Define budding.

10) Define spore.

11) What two groups can animals be divided into?

12) Give 3 examples of each group.

13) What can many invertebrates do?