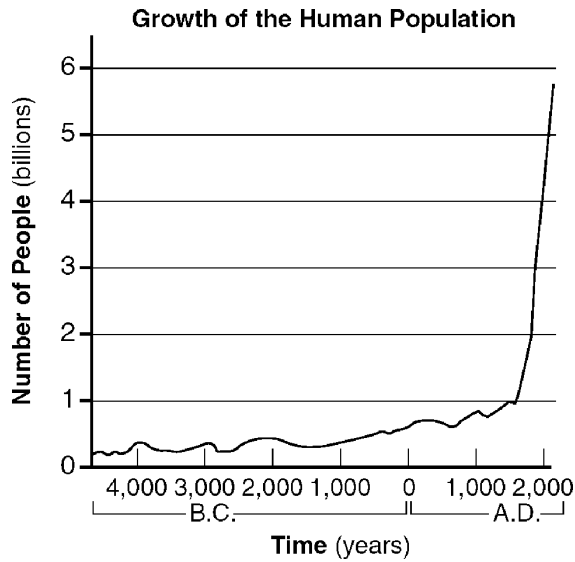


Interactions of Populations and the Environment 3

Name: _____

Date: _____

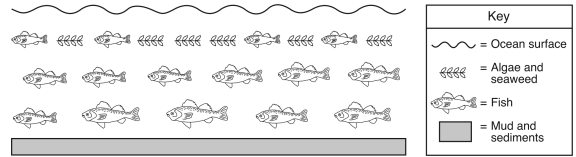
1. The graph below shows how the human population has grown over the last several thousand years.



Which statement is a valid inference that can be made if the human population continues to grow at a rate similar to the rate shown between 1000 A.D. and 2000 A.D.?

- A. Future ecosystems will be stressed and many animal habitats may be destroyed.
- B. Global warming will decrease as a result of a lower demand for fossil fuels.
- C. One hundred years after all resources are used up, the human population will level off.
- D. All environmental problems can be solved without a reduction in the growth rate of the human population.

2. An ecosystem is represented below.



The organisms represented as are found in the area shown due to which factor?

- A. pH
- B. sediment
- C. light intensity
- D. colder temperature

3. The diagram below represents genetic material.

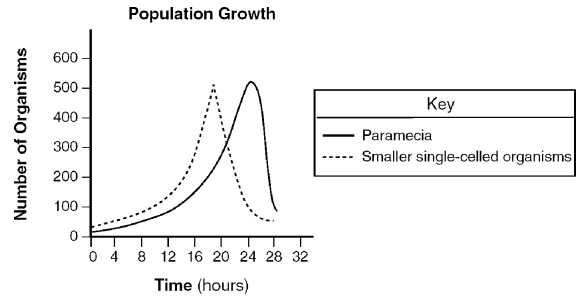


The expression of the section labeled X may be modified by

- A. temperature, only
- B. asexual reproduction
- C. the environment
- D. pH, only

4. Base your answer(s) to the following question(s) on the information and graph below and on your knowledge of biology.

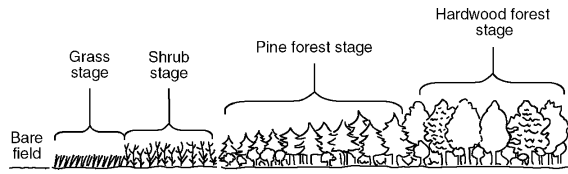
A population of paramecia (single-celled aquatic organisms) was grown in a 200-mL beaker of water containing some smaller single-celled organisms. Population growth of the organisms for 28 hours is shown in the graph below.



One likely explanation for the change in the paramecium population from 26 hours to 28 hours is that the

- A. carrying capacity of the beaker was exceeded
- B. rate of reproduction increased
- C. time allowed for growth was not sufficient
- D. oxygen level was too high

5. Which of the stages in the diagram below consists of plant species that modify the environment, eventually making it more suitable for another community?



- A. grass stage, only
- B. grass, shrub, and pine forest stages
- C. shrub, pine forest, and hardwood forest stages
- D. hardwood forest stage, only

1.
Answer: A
2.
Answer: C
3.
Answer: C
4.
Answer: A
5.
Answer: B