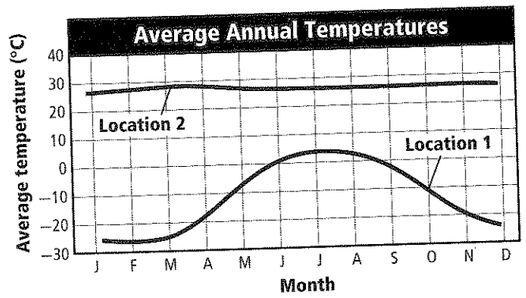
Standardized Test Practice

Cumulative

Multiple Choice

1. If science can be characterized as discovery, then technology can be characterized as which?
   A. application
   B. information
   C. manufacturing
   D. reasoning

Use the illustration below to answer questions 2 and 3.

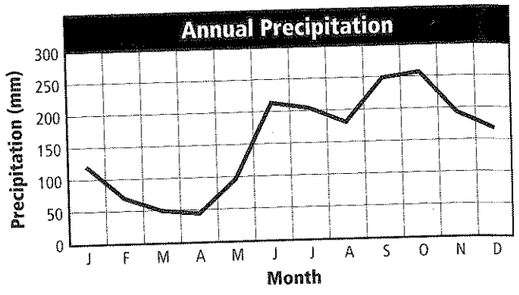


2. Based on the graph above, which term describes Location 2? SC.912.L.17.4
   A. oceanic
   B. polar
   C. temperate
   D. tropical

3. Suppose that in Location 2 there is very little rainfall during the year. What would be the name of that biome in this region? SC.912.L.17.4
   A. desert
   B. tundra
   C. temperate forest
   D. tropical rain forest

4. Which process is associated with long-term cycling of matter through the biosphere? SC.912.L.17.9
   A. breakdown of organic material by decomposers
   B. formation and weathering of minerals in rocks
   C. formation of compounds used for food by living organisms
   D. movement of fresh water from the land into bodies of water through run-off

Use the illustration below to answer question 5.



5. Look at the information in the graph. From what kind of biome are these data probably taken? SC.912.L.17.4
   A. desert
   B. tundra
   C. temperate forest
   D. tropical rain forest

6. Which system of measurement is the basis for many of the SI units? SC.912.L.17.2
   A. binary
   B. English
   C. metric
   D. number

7. Which of these organisms is a decomposer?
   A. a bacterium that makes food from inorganic compounds
   B. a clam that takes in water and filters food
   C. a fungus that gets nutrients from dead logs
   D. a plant that makes food using sunlight SC.912.L.17.9

8. Which distinguishes scientific ideas from popular opinions? SC.912.N.1.3
   A. Popular opinions are always rational and logical.
   B. Popular opinions depend on research and evidence.
   C. Scientific ideas are always testable and repeatable.
   D. Scientific ideas depend on anecdotes and hearsay.

Short Answer

9. How is a tundra similar to and different from a boreal forest? Use a Venn diagram to organize information about the similarities and differences of these biomes. SC.912.L.17.4

10. What is the role of a pioneer species in primary succession? SC.912.L.17.4

11. Give two examples of how the human body shows the living characteristic of organization. SC.912.L.17.6

12. Suppose a certain insect species lives only in a specific species of tree. It feeds off the sap of the tree and produces a chemical that protects the tree from certain fungi. What kind of relationship is this? SC.912.L.17.9

13. Why would you expect to find different animals in the photic and aphotic zones of the ocean? SC.912.L.17.2

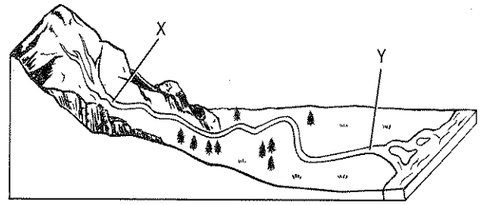
14. Suppose a gardener learns that the soil in a garden has low nitrogen content. Describe two ways to increase the nitrogen available for plants in the garden. SC.912.E.7.1

15. Explain how the establishment of a climax community through primary succession differs from the establishment of a climax community that occurs through secondary succession. SC.912.L.17.4

16. Why is the ability to adapt an important characteristic of living things? SC.912.L.17.4

Extended Response

Use the illustration below to answer question 17.



17. Based on the information in the illustration above, what can you infer about the major differences between the freshwater ecosystems at Point X and Point Y? SC.912.L.17.2

18. Suppose a nonnative species is introduced into an ecosystem. What is one kind of community interaction you might expect from the other organisms in that ecosystem? SC.912.L.17.4

Essay Question

Suppose there is a dense temperate forest where people do not live. After a few hot, dry months, forest fires have started to spread through the forest area. There is no threat of the fires reaching areas inhabited by humans. Some people are trying to get the government to intervene to control the fires, while others say the fires should be allowed to run their natural course.

Using the information in the paragraph above, answer the following question in essay format.

19. Explain which side of this debate you would support. Provide evidence based on what you know about change in ecosystems. SC.912.L.17.13

NEED EXTRA HELP?																			
If You Missed Question . . .	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Review Section . . .	3.2	3.2	3.2	2.3	3.3	1.2	2.2	1.3	3.2	3.1	1.1	2.1	3.3	2.3	3.1	1.1	3.3	3.3	3.1, 3.2