

Wk 6 “Biogeography” Case Study

Read the case study (pg 94-96) and complete the following questions.

A. In what ways is the mountain top similar to the tundra biome?

B. Using plants as a clue, explain what happens to temperature as you climb a mountain.

C. In your own words, describe the changes in vegetation you would expect to see as you traveled from Southern USA to the Canadian Arctic.

D. Compare the rainfall in boreal and temperate forests.

E. According to the climatograph, what factor accounts for the difference between a boreal forest and temperate deciduous forest?

F. Compare deserts with arctic tundra.

G. What changes in climate could turn a boreal forest in to a grassland ?

H. What changes in climate could turn a grassland in to a desert? .

I. Over 12 months, which biome shows the least change in precipitation? In temperature?

J. Over 12 months, which biome shows the greatest change in precipitation? In temperature?

K. Explain why plants that grow in a temperate deciduous forest have problems that plants in a tropical forest will not face.

L. Why wouldn't tall grasses or deciduous trees be well adapted to an arctic area?

M. Many plants do not grow in winter. Using the graphs in **Figure 3** in your answer, explain why this would be a good strategy in grassland and temperate deciduous forest, but not in tropical forest.

N. Most coniferous trees have narrow, pointed leaves (needles), covered by a waxy coating. Explain how these leaves help them to deal with climate in the boreal forest.

O. How does the root system of the foxtail allow it to survive in a climate that offers little precipitation?

P. To which type of climate is the Indian mallow adapted?
