

A Bird's Eye View: Exploring Your Region

PART A: Comparing Your Study Site to One in Another Region

Look at both the sample study site diagram and your own class diagram. Compare the components and interconnections among those components that appear in each diagram.

1: Does the sample study site diagram emphasize aspects of the study site that are different from the aspects emphasized in your diagram? Which aspects?

2: Why does your diagram emphasize different interconnections and components of the Earth system than the example study site diagram? Explain.

PART B: Defining Your Region

1: What features or characteristics are you using to identify your region? Why?

2: How will you describe your region to the class? List the geographic landmarks that will help you identify the full circumference of the region's boundaries – north, south, east, and west. You can use latitude and longitude lines, if necessary.

PART C: Exploring Regional Inputs and Outputs

1: Write three "what-if" questions about changes to specific inputs and outputs of the region. For *each* of those what-if questions, make a prediction. How will that change affect the other components (atmosphere, hydrosphere, pedosphere, and biosphere) of the region?

Example:

Question: What if the stream coming through the region was dammed up before the water entered the region?

Prediction: The plants in the region would die and the animals would leave due to lack of water. (biosphere) The region would be dryer because there would be less water both in the soil and atmosphere. (pedosphere, atmosphere) The stream bed would dry up and the fish would die. (hydrosphere, biosphere)

Tips

- Make sure your questions and predictions deal with only one change to the system at a time.
- Write your predictions in terms of the four major components of the Earth system. For example, *How might the change affect the atmosphere? How might it affect the biosphere (living things)?*
- Be prepared to defend any predictions you make on the basis of scientific knowledge.

2: Do you think your region is an open, closed, or isolated system? Explain.