

# Think Globally, Act Locally

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Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Part B: Visit Your Local Study Site

### ***Instructions***

Look around your study site. What do you see, hear, smell? Describe and analyze what you observe.

1. Where is your local study site in relation to your school? Is it in an urban, suburban, or rural area?

2. Approximately how big is your study site (in feet or meters)?

3. Identify some examples of the four major components of the Earth system:

**atmosphere (air, including wind, clouds, and precipitation):**

**hydrosphere (water):**

**pedosphere (soil):**

**biosphere (living things):**

4. Identify and record connections among the four components of the Earth system by: making observations; recalling and integrating your existing knowledge about them; and speculating carefully about the connections that might be taking place.

Record your answers on the **Observations** page of this Work Sheet. An excellent list of interconnections will be long; it will involve all four of the components; it will be specific; it will bring in your knowledge from previous studies in other classes as well as this one; and it will show that you are thinking deeply and carefully about your study site.

***Tips, Questions, and Comments to Get You Thinking***

- Write down your observations as short phrases. Use verbs.  
*Example: Leaves fall, decompose, and become part of the soil.*
  - Write down as many interconnections as you can think of. Be as specific as you can. You can even use general quantities, such as “a little,” “some,” or “a lot.”
  - Work with other students if you wish, but before you add anything to your list, make sure you understand it and agree with it!
  - Examples of questions you might consider: *What happens in the soil that changes the characteristics of the living things at the site? What happens in the water that changes the characteristics of the air? What moves from one study site component to another?*
  - Explore actively and thoughtfully. If your teacher gives you permission, dig small holes, turn over stones, and examine the water, soil, and vegetation with a magnifying glass. Take time to sit quietly and contemplate the study site as well.
  - It may help your thinking to compare this place to others. *What’s happening at this site that doesn’t happen somewhere else? How is this one different? What about soil characteristics? Different kinds of plants? Less water, or more?*
  - Recall ideas from other courses you have taken. Think about biology, chemistry, Earth science, ecology, geography, meteorology, and physics.
  - After you’ve made an initial list, look it over. Be sure you have described examples at the study site for each of the four components. *Is each of them acting upon each of the other three in at least two or three ways?*
5. The designated photographer should take several photographs of the study site, with one in each of the four cardinal directions (N, E, S, W). The photographs should show as many as possible of the four major Earth system components.

## **Observations: Connections Among Components**

Atmosphere-Hydrosphere Interconnections	Atmosphere-Pedosphere Interconnections
Atmosphere-Biosphere Interconnections	Hydrosphere-Pedosphere Interconnections
Hydrosphere-Biosphere Interconnections	Biosphere-Pedosphere Interconnections