## Figure 3

The botanical sense-of-place writing template (used with permission of EarthScholars Research
Group, James Wandersee, and Renee Clary)

Name:
Traine.
The goal of this learning tool is first, to help you recall, and second, to help you connect the experiences you had with plants as a youth with the plant biology concepts you are learning in this unit.
Part 1: Write short answers to each of the 17 memory probes below.
<ol> <li>Which plant was an important part of playtime in your yard?</li> <li>What part of a plant interested you the most as a child?</li> <li>Was there a particular food item that you enjoyed picking and eating directly from the plant during your childhood?</li> <li>Did you have a particular job (e.g., household chores) as a youth that involved plants?</li> <li>Was there a favorite tree you used to sit under or love to climb in your neighborhood?</li> <li>As a youth, what was your favorite plant to smell?</li> <li>Did any of your childhood crafts involve making things from plant parts?</li> <li>Which plant had a texture you enjoyed touching as a youth?</li> <li>What was the most unusual native plant you encountered as a child?</li> <li>Did you tend your own garden plants or houseplants? If so, which ones?</li> <li>What crop was your town or geographic area most famous for?</li> <li>Which plant did you most carefully avoid as a child?</li> <li>What exotic plant (such as a cactus) made a big impression on you as a child?</li> <li>Were there any plants that made sounds you can remember from your childhood?</li> <li>Did you have a person in your youth who was your plant mentor, and if so, what did you learn from this person</li> </ol>
about growing or identifying plants?  16. What was your favorite flower as a child, and why?  17. When you hear the word <i>green</i> , which plant's shade/hue of green defines that color?
Part 2: Complete two mini-essays using memories you tapped into during part 1. Choose any of these "take-off sentences" to begin each essay you write. Use the two attached blank pages for the actual essay writing.
Choices:  2A. It was one of the very best days of my childhood, and it involved the plant  2B. The plant I learned the most about from practical experiences in my childhood was  2C. I had been warned about the plant, but I didn't  2D. When I think of my (grandmother/grandmother/father/mother—circle one), the plant I associate most with that person is the My memories revolve around  2E. From my youth, I remember this plant, featured in a story [ ], most prominently (of all the children's books that I read) because
Part 3: What connections do you now see between your own memories of your botanical sense of place and three selected plant biology concepts that you are learning about in this biology unit?
Biology concept A: Connection: Biology concept B: Connection: Biology concept C: Connection:

Permission is granted to classroom teachers to use this instrument with their own classes, provided no changes are made in the instrument.

## Figure 4

Geological sense-of-place writing template (used with permission of Earthscholars research group, renee clary, and James Wandersee)						
Name:						
The goal of this learning tool is to help you recall and connect the experiences you had with geological products, landforms, and processes as a youth with the physical geology concepts you are learning this unit.						
Part 1: Write short answers to each of the 17 memory probes below.						
<ol> <li>Which geological product was an important part of play time in your yard?</li> <li>What part of the Earth interested you the most as a child?</li> <li>Was there a particular rock or Earth-related item that you enjoyed collecting during your childhood?</li> </ol>						
<ul><li>4. Did you have a particular chore or job as a youth that involved rocks or minerals?</li><li>5. Was there a favorite rock or landform you used to sit or climb on in your neighborhood?</li></ul>						
<ul><li>6. As a youth, what was your favorite geological process to read about, view on television, or experience?</li><li>7. Did any of your childhood crafts involve making things from rocks or geological products?</li><li>8. Did any particular kind of rock have a texture you enjoyed touching as a youth?</li><li>9. What was the most unusual rock, landform, or geological process you encountered as a child?</li></ul>						
<ul> <li>10. Did you have your own rock or fossil collection? If so, which types did you have?</li> <li>11. What geological formation or product was your town or geographic area most famous for?</li> <li>12. Was there any particular geological object or landform you avoided or were afraid of as a child?</li> </ul>						
<ul> <li>13. What exotic geologic location made a big impression on you as a child?</li> <li>14. Were there any sounds associated with geological processes or events you can remember from your childhood?</li> <li>15. Did you have a person in your youth who was your geology mentor, and what did you learn from that person about identifying or understanding rocks, fossils, or Earth processes?</li> </ul>						
<ul><li>16. What was your favorite gemstone as a child, and why?</li><li>17. When you hear the word <i>rock</i>, which color do you associate with the word?</li></ul>						
Part 2: Complete two mini-essays using memories you tapped into during part 1. Choose any of these "take-off sentences" to begin each essay you write. Use the two attached blank pages for the actual essay writing.						
Choices:  2A. It was one of the very best days of my childhood, and it involved the rock/mineral/landform called						
2B. The geological process I learned the most about from practical experiences in my childhood was						
2C. I had been warned about the (geological object, landform, or process), but I didn't  2D. When I think of my (grandmother/grandmother/father/mother—circle one), the geological object, event, or landform I associate most with that person is the My memories revolve around  2E. From my youth, I remember this geological object/process/landform was featured in a story [ ],						
most prominently (of all the children's books that I read) because						

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Part 3: What connections do you now see between your own memories of your geological sense of place and three

selected physical geology concepts that you are learning about in this geology unit?

Geology concept A: \_\_\_\_\_ Connection:
Geology concept B: \_\_\_\_ Connection:
Geology concept C: \_\_\_\_ Connection:

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