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

**Biogeography Practice**

There is a group of turtles living on a chain of islands off of the coast of South America. Island 1 is 100 km from South America; Island 2 is 250 km from South America; and Island 3 is 500 km from South America.

1. On the back of this paper, draw a map of these three islands and South America. You can use simple shapes for the mainland and the islands.   
   **Use a scale of 5 cm = 100 km.**
2. Species C lives on Island 1. Species A lives on Island 2. Species B lives on Island 3. Label the islands with the correct species.
3. In the space at the bottom of this paper, create a phylogenetic tree for these three species that shows the species diverging from a South American ancestor. Refer to the biogeography tree in your packet for an example of what this should look like.
4. The table below shows traits for these three turtle species. Add the traits to your phylogenetic tree.

|  |  |  |  |
| --- | --- | --- | --- |
| **Trait** | **A** | **B** | **C** |
| Square shell | yes | yes | Yes |
| Long flippers | no | yes | No |
| “Snapping” jaw | yes | yes | No |
| Striped shell | no | no | yes |