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

**Biodiversity in the Galapagos:**

**Why so many Ground Finches (*Geospiza*)?**

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

The medium ground finch (*Geospiza fortis*) lives on many of the islands in the Galapagos.

*Why then are there five other kinds of “ground finches” found among the islands as well? And how can our Wormeaters (the Sequel) game help us to understand this small piece of biodiversity?*

Make sure you have the Galapagos Ground Finches Map and Data Table in front of you.

In your group, **pick one pair** (two species) from the six species listed in the data table to focus on. Then **work with your group to analyze the data** for these two species in order to answer the following questions.

OUR TWO SPECIES ARE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Why do you think both of these species exist on the islands? (Why not one?) Are there ways in which they are different?

1. How might the results of our Wormeaters (the Sequel) game help you in your thinking about question #1? (*Hint: do different food sources—diets or habitat--play a role in your answer to question #1? If so, how?*) If you do not think the ideas from our game are part of the story for your two focal species, briefly state why.

Next look carefully at the species tree on the back of the data sheet.

1. In our Wormeaters (the Sequel) simulation, the “divergence” (process of becoming different) among our classroom Wormeater populations was happening all at once (during the class period). What does the tree tell you about the process or timing of some of the divergence between the pair of ground finch species you chose? Record some thoughts from your group’s discussion here.
2. In summary, why do you think so many species of ground finches exist?
3. Is the story of divergence between the two finch species you chose the same as what we saw in the game? Why or why not?
4. What questions do you and your group still have?

*Make sure at least one member of the group is ready to share out a brief summary of your thinking and that everyone can relay at least one key idea that came up.*