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| **iLearn BI 101**  **Report** | **Food Web Assessment:**  **Habitable Planet Food Web Ecology** | Name: |

As you complete the Habitable Planet Ecology Lab, answer the questions below. To fill in your answers to each question, click on the grey text box and begin typing. When completed, submit this document through the assignment submission page on the Canvas course website.

**Lesson 1: The Producers**

1. What assumptions does this model make about co-dominance and the general terrain of the simulated ecosystem? Are these assumptions realistic in the real world? Why or why not?

1. Do you find one producer to be dominant? What are some reasons one producer might be dominant over another?

1. Does the herbivore establish a more equal field? Is one producer still dominant over another?

1. If the simulation included decomposers, how might your current results change?

1. How do producer population numbers with the presence of an herbivore compare to the primary colonizer model?

**Lesson 2: Food Web**

1. After creating a food chain with an herbivore and omnivore present, what was your prediction on the effects of adding these animals into the habitat? Were your correct? Describe any differences between your predicted outcome and the results from the simulation.

1. What would happen to this imaginary ecosystem if the producers were to die out?

1. For species that increased in number, explain what you think might account for this increase. What about the populations that increased in size? What explanation might account for this change?

1. Which populations would benefit the most from the presence of decomposers?

1. Explain your thought processes as you modified the parameters of the simulation to find a way to support all the organisms in the simulation. Explain how you decided what changes to make.

1. Ecosystems have an extremely complex web of cause and effect. Changing one connection or altering the population of any species within an ecosystem can have dire, cascading effects on all others within that ecosystem. What were some surprising effects you discovered as you attempted to build your perfect food web? For example, did you see more dramatic results by changing the diet of animals at the top of the food web those down in lower trophic levels?

1. Now you will need to insert a picture of your food web. There are a number of ways you can accomplish this task, depending on the computer and digital devices you have available to you. For instance if you have a smart phone or digital camera, you could draw out your food web by hand and take a picture of it to upload onto your computer. Or you could use a drawing program to create it on the computer, and save it as a picture file (.jpg) to upload into the report. But regardless of how you accomplish it, an image that clearly demonstrates your food web must be included in your submission. Click on the picture icon below to insert your image. Contact your instructor if you need assistance on this step.

