**Name/s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_\_\_**

**Food Web Poster**

**Biology**

**Directions:**

1. Obtain an ecosystem from the teacher. Write it here \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Use a posterboard; title it with the name of your ecosystem (and don’t forget group members’ names).
3. Choose 12 - 15 organisms (draw or print them from the internet) that live in your ecosystem and correctly label them with their ***common name***. (One bonus point for each **scientific name** listed!)
4. Create a food web using the organisms that live in your ecosystem. The food web must display arrows to show proper energy flow. Each organism **must** have an arrow pointing toward or away from it (most will have both, unless they are a producer or top-level consumer). Arrows **always** go from the **prey** (what gets eaten) to the **predator** (what receives the energy).
5. The food web must contain ***producers*** (autotrophs – usually plants and some bacteria; make their own food by harnessing energy from the sun/photosynthesis) and ***consumers*** (heterotrophs – organisms that eat other organisms), with each one correctly labeled. The trophic level for each organism must also be correctly labeled (***primary/1st level, secondary/2nd level, tertiary/3rd level*, *quaternary/4th level***)
6. The food web must contain at least one of each of the four types of consumers – ***herbivores*** *(eat only plants)****, omnivores*** *(eat plants and animals)****, carnivores*** *(eat only animals)****, and detritivores/decomposers*** *(break down dead organic matter for others to use)*. You might also have a ***scavenger*** *(eats the leftovers from other organisms)* amidst your ecosystem! Label each correctly.

\*Use your book and the internet to determine the modes of nutrition, trophic levels, and types of consumers.

**Rubric:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Category** | **5 points** | **4 points** | **3 points** | | **2 points** | **1 point** | **Earned** |
| **Participation** | Students participated fully in the project and worked well with teammates. | Most of the time the students participated in the project and worked well with teammates. | Some of the time the students participated in the project and worked well with teammates. | | Students rarely participated in the project and did not work well with teammates. | Students never actively participated in the project and did not work well with teammates. |  |
| **Using Class Time Wisely** | Group used time well during each class period, focused on getting the project done, and never distracted others. | Group used most of time well during each class period, usually focused on getting the project done, and never distracted others. | Group used some of time well during each class period and had some focus on getting the project done, but occasionally distracted others. | | Group did not use class time very well. There was some focus on getting the project done, but occasionally distracted others. | Group did not use class time well at all, never focused on completing the project, and was constantly distracting others. |  |
| **Content** | The poster includes all required elements. | The poster includes almost all required elements. | The poster includes most of the required elements, but some labels are missing. | | The poster includes some of the required elements, but several labels are missing. | The poster is missing several required elements and labels and/or has none of the required elements. |  |
| **Accuracy** | All the facts about the organisms within the ecosystem and labeling are correct. | Almost all the facts about the organisms within the ecosystem and labeling are correct. | Many of the facts about the organisms within the ecosystem and labeling are correct. | | Some of the facts about the organisms and labeling are correct. | There are more items that are inaccurate than are accurate on the poster. |  |
| **Attractiveness & Appearance** | The poster is exceptionally attractive in terms of design, layout, and neatness. | The poster is attractive in terms of design, layout, and neatness. | The poster is acceptable in terms of design, layout, and neatness. | | The poster is acceptable in terms of design & layout, but is a bit messy/confusing. | The poster is distractingly messy and very poorly designed. |  |
| **Total (+/-)** | **\*Bonus points \_\_\_ × 1 = \_\_\_** | | | **Day/s late \_\_\_ × 2 = \_\_\_** | | |  |
| **Grand Total** | **\_\_\_ (Total) – \_\_\_ (Day/s late) × 2 =** | | | | | | **\_\_\_\_\_/50** |
| **\_\_\_/50 × \_\_\_ + \_\_\_ (Bonus) = \_\_\_ (split) \_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( ) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( ) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( )** | | | | | | | |