**Name(s) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class Period:\_\_\_\_\_\_**

**Food Web Poster**

**Environmental Science**

**Directions:**

1. Obtain an ecosystem/biome from the teacher. Write it here \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Obtain a poster paper and title it with the name of your ecosystem (and don’t forget group members’ names).
3. Choose at least **14 organisms and include their picture** (draw or print them from the internet-**must be colored**) that *live in your ecosystem/biome* and correctly label them with their ***common name*** (one bonus point for each **scientific name** listed!). *They must be members of the biome/habitat to count towards the 14*. Example: You pick the desert biome, but a Polar bear is on your Food Web. The polar bear would result a point deduction.
4. Create a food web using the overlapping food chains of the organisms that live in your ecosystem/biome. 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 is 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 consumer must also be correctly labeled (***primary/1st level, secondary/2nd level, tertiary/3rd level*, *quaternary/4th level***). It’s possible that some organisms will have multiple labels.
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 decomposers*** *(break down dead organic matter for others to use)*, with each one correctly labeled. You might also have a ***scavenger*** *(eats the leftovers from other organisms)* amidst your ecosystem! If so, label it too.
7. The food web must contain a keystone species. Make sure that you complete you research and find out what the keystone species of your ecosystem/biome is.
8. Include an MLA or APA reference page with at least three citations.
9. The rubric on the back of this page will be used to grade your project. **Please turn this sheet in with your project.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Category** | **10 points** | **8 points** | **6 points** | **4 points** | **2 points** | **Earned** |
| **Participation (group members may receive different values)** | Student participated fully in the project and worked well with teammates | Most of the time the student participated in the project and worked well with teammates | Some of the time the student participated in the project and worked well with teammates | Student rarely participated in the project and did not work well with teammates | Student 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 other. |
| **Content** *(this category is weighted three times for a total of 30 points)* | 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** *(this category is weighted three times for a total of 30 points)* | 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 |
| **References** | MLA/APA reference page included, contains at least 3 citations, contains correct formatting | MLA/APA reference page included, contains at least 2 citations, contains correct formatting | MLA/APA reference page included, contains at least 1 citation, contains correct formatting | MLA/APA reference page included but format is not correct | MLA/APA reference page is not included |
| **Grand Total** |  | **\_\_\_\_\_/100** |
| **Bonus Points** |  | **\_\_\_\_\_/14** |
| **Total Points** |  |  |
| **Comments:** |