*Biome Adaptation and Symbiosis Activity*

*Due Tuesday August 30, 2016*

**SEV3. Students will describe stability and change in ecosystems.**

e. Describe interactions between individuals (*i.e.* mutualism, commensalisms, parasitism, predation, and competition).

**SEV2. Students will demonstrate an understanding that the Earth is one interconnected system**

c. Characterize the components that define a Biome. Abiotic Factors – to include precipitation, temperature and soils.

Biotic Factors – plant and animal adaptations that create success in that biome.

d. Characterize the components that define fresh-water and marine systems.

Abiotic Factors – to include light, dissolved oxygen, phosphorus, nitrogen, pH and substrate.

Biotic Factors – plant and animal adaptations characteristic to that system.

Day 1: Biome Adaptation

For your assigned biome you shall create two organisms, one plant and one animal. It must be adapted to survive in that specific biome. You are required to show four adaptations for each one, explain their use and draw its picture.

The four adaptations should show the following:

* How the organism obtains shelter or deals with the amount of sun/precipitation/temperature of the biome
* How the organism obtains its nutrients to survive
* How it prevents itself from becoming someone else’s dinner
* One that is specific to the biome.

Your information and picture should be display ready. Your display must have your biome name on it.

Day 2: Symbiosis

For the organisms that you created for your biome, you shall show its relationships inside its biome. You are to give one of each of the three symbiotic relationships, as well as a predator/prey relationship for both your plant and animal. They can be in a relationship together. The relationships shall be written and explained on your organism’s sheet.

* Mutualistic
* Parasitic
* Communalistic
* Predator/Prey

Biome Adaptation and Symbiosis Activity Grade Sheet

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| --- | --- | --- | --- | --- | --- |
| *Category* | *1 pt* | *2 pts* | *3pts* | *4pts* | *Total:* |
| *Plants*  *Biome Symbiosis* | 1 of 4 relationships are explained and are feasible | 2 of 4 relationships are explained and are feasible | 3 of the 4 relationships are explained and are feasible | All four relationships are explained and feasible |  |
| *Animals*  *Biome Symbiosis* | 1 of 4 relationships are explained and are feasible | 2 of 4 relationships are explained and are feasible | 3 of the 4 relationships are explained and are feasible | All four relationships are explained and feasible |  |
| *Plants*  *Biome Adaptations* | adaptations mentioned | Picture roughed sketched, adaptations explained | Picture presentable, Adaptations fit biome and explained | Picture shows adaptations which fit the biome and are explained. |  |
| *Animals*  *Biome Adaptations* | adaptations mentioned | Picture roughed sketched, adaptations explained | Picture presentable, Adaptations fit biome and explained | Picture shows adaptations which fit the biome and are explained. |  |
| ***Overall total*** | | | | | ***/ 16*** |