

Biomes Project

Biomes are terrestrial, climatically controlled set of ecosystems that are characterized by distinctive vegetation and among which there is an exchange of water, nutrients, gases, and biological components including people.

We will focus on the following Biomes for this project:

1. Arctic Tundra
2. Taiga
3. Temperate Deciduous Forest
4. Grasslands (USA)
5. Savanna (Africa)
6. Desert
7. Tropical Rainforest
8. Chaparral
9. Aquatic Fresh water
10. Aquatic Salt water

Unfortunately a crazed despot calling himself the Bearded Man has seized all of the world's governments. He has decreed that one of the biomes will be eliminated. You have been charged with the task of pleading the case for your assigned biome in an attempt to persuade the Bearded Man from destroying your biome.

The class will act as the jury for this assignment and vote after the presentations. You will need to prepare materials to educate the class so as to make it impossible for us to eliminate your biome. You may choose to do this in any way you think will work best: Video, Song, Play, Power Point or anything else that you can think of (ask me first if it is really abstract or involves flammable materials) You can mix and match or stick with just one of the above but there are requirements.

1. What are the distinguishing climatic characteristics of your biome? (rainfall, temperature etc)
2. Where in the world is it found?
3. What are the three key plant species found in your Biome (this is the plant unit after all)
4. Adaptations of plants to the biome (how are they built to survive the climate) .
5. You must tell us the key members of the food web and how they interact.
6. List the environmental impact that would occur should your biome be eliminated
7. Tell us what ecological and economic benefits your biome provides the biosphere (how are the plants there used by humans)
8. Your presentation can be no longer than 10 minutes nor shorter than 5.
9. You will hand in something with your works cited and a copy of your presentation.

You will be provided with only one period of class time to work in the library and you should not expect any additional class time to work on your project.

Your grade will be based on how effectively and originally you present the information on your biome. This assignment is worth 99 points and an extra 5 points will be given to those biomes that are not voted off. This means you can all receive a 100% but some of you will get 5 extra points for doing an extra special good job.

The presentations will be presented on _____

Biomes Presentation Rubric

Student Name:

Due Date:

This analytic rubric is used to verify specific tasks performed during your presentation. If the task has been completed, all points are awarded. If the task is incomplete half points may be awarded. No points are awarded if the task is not complete.

Category	Scoring Criteria	Points	Student Evaluation	Teacher Evaluation
Climatic characteristics <i>9 points</i>	The amount of seasonal rainfall is provided	3		
	The range of seasonal temperatures is provided	3		
	Location on the planet is displayed	3		
Vegetative features <i>20 points</i>	3 Key plant species are described (a drawing/photo of each)	15		
	Specific adaptations of plants to the biome	5		
Food Web <i>15 points</i>	Key members of the food web listed and explained	10		
	Levels of the food web explained (producers, primary consumers, secondary consumers etc)	5		
environmental impact <i>15 points</i>	What is the role of the biome in terms of cycling materials (carbon, nitrogen, water cycles)	5		
	What would the loss of this biome do to the world	5		
	What are the economic benefits derived from your biome	5		
Presentation <i>30 points</i>	Presenter is knowledgeable and ready to participate (this includes having your materials ready)	5		
	Materials are clear and easily read from the back row	5		
	Overall accuracy of information	5		
	Creativity of presentation (you know how I feel about "crappy posters")	10		
	Works Cited in MLA format	5		
Time Limit <i>5 points</i>	Between 5 and 10 minutes long	5		
Rubric	Rubric is completed before presentation	5		
Score	Add Up Your Total Points	99		
Self-evaluation	If the difference between the student evaluation and the teacher evaluation is less than 5 points, 5 points will be added to the teacher's score when the grade is recorded.			
Deadline	Anything turned after the due date will be mulched for use in the AgSci greenhouse and receive ¼ credit.			

Name: _____
Biomes Project Library Research

My assigned biome: _____

1. Define your biome:
2. Where on the earth is your biome found?
 - a. name at least two countries where your biome exists
3. List the distinguishing climatic characteristics
 - a. What is the average yearly rainfall?
 - b. What are the seasons in your biome?
 - c. What is the seasonal temperature range?
4. Look up three key (prominent) plant species found in your Biome (write down their name and some interesting facts about them)
 - a.
 - b.
 - c.
5. Adaptations of the plants above to the biome (how are they built to survive the climate)

6. Draw and label your biome's food web. How do the plants and animals interact?

7. 3 Economical benefits your biome provides humans

a.

b.

c.

8. Environmental benefit of your biome. What job does it do for the planet?

9. Other interesting facts about your Biome or the plants or animals that live there. (These will help persuade us not to vote you off the planet)

Name: _____

Biomes Project Library Research: Aquatic

My assigned biome: _____

1. Define your biome:
2. What percentage of the Earth's surface is covered with your kind of water?
3. What are some named examples and locations of large bodies of your kind of water (oceans/lakes)
4. List the distinguishing characteristics of the layers/levels of your body of water
 - a. What is the average temperature range at each depth?
 - b. Is there a change in seasonal temperature range?
 - c. What are the light and chemical conditions at each level? (Oxygen/nitrogen/phosphorus)
5. Look up three key (prominent) plant species found in your Biome (write down their names and some interesting facts about them)
 - a.
 - b.
 - c.
6. Adaptations of the plants listed above to the biome (how are they built to survive the climate)

7. Draw and label your biome's food web. How do the plants and animals interact?

8. 3 Economical benefits your biome provides humans

a.

b.

c.

9. Environmental benefit of your biome. What job does it do for the planet? Explain the Water Cycle

9. Other interesting facts about your Biome or the plants or animals that live there.
(These will help persuade us not to vote you off the planet)