

BIOMES AND ECOREGIONS PROJECT – MAJOR GRADE

BACKGROUND:

Biomes and their [Ecoregions](#):

Freshwater

Rivers and Streams-[Large Rivers](#), [Xeric Basins](#)

Ponds and Lakes-[Large Lakes](#), [Small Lakes](#)

Wetlands-[Mangroves](#), [Flooded Grasslands & Savannas](#)

Marine Ecosystems

Shorelines-[Mangroves](#)

Temperate Oceans-[Temperate Shelf and Seas](#), [Polar](#)

Tropical Oceans-[Tropical Coral](#)

Terrestrial

Rainforest-[Tropical and Subtropical Moist Broadleaf Forests](#), [Tropical & Subtropical Dry Broadleaf Forests](#)

Tundra-[Tundra](#)

Taiga-[Boreal Forests / Taiga](#)

Desert-[Deserts & Xeric Shrublands](#)

Temperate-[Temperate Coniferous Forests](#), [Temperate Broadleaf & Mixed Forests](#), [Mediterranean Forests, Woodlands & Scrub](#), [Tropical & Suptropical Coniferous Forests](#)

Grasslands-[Montane Grasslands & Shrublands](#), [Temperate Grasslands, Savannas & Shrublands](#), [Tropical & Subtropical Grasslands, Savannas & Shrublands](#)

YOUR PROJECT OVERVIEW:

- You will select one of the Ecoregions below and create an informative presentation about it that summarizes the information you have learned this six weeks.
- This project will be due October 3rd (Thursday) and viewed by your fellow classmates online October 4th (Friday). The grade for this project will include both your work on the project and your viewing/critique of your classmate's projects on Friday.
- You will need to include all the information listed under **YOUR TASK** and list at least 5 sources using MLA or APA format (like you do in English class).
- A grading rubric will be used by your teacher to grade your project, you should use it as a guide while doing your work. Please note, there are two reflections that you must add to your project and they are highlighted in the rubric.
- You can chose your presentation format from the **PRESENTATION OPTIONS LIST** below.
- There is a **RESOURCES** page with applicable websites to help get you started also below.

YOUR TASK:

Describe your ecoregion and the biodiversity that makes it up. What threats does this ecosystem face and are there any mitigation strategies that could be taken?

- What is the geology of your ecoregion? In what ways does the geology affect the ecoregion? What are the other abiotic factors that affect the ecoregion (ex. temperature, rainfall, soil type, etc.)
- Describe the biotic systems in this ecoregion including at least one nutrient cycle. What plants and animals live there? Describe at least 2 types of interactions (predator/prey, mutualism, etc.) that can be found in this ecoregion. What is one of the keystone species in this ecoregion?
- How do humans interact with the ecoregion? (Ideas to consider: Do they live there?, rely on the ecoregion for food/survival?, use the area for industry?, go there for tourism? Obtain natural resources from there? etc.)
- What are the threats that face this ecoregion? How did these threats originate? Why are they viewed as threats to the ecoregion? What will happen if the ecoregion is damaged or destroyed?
- Describe at least one thing being done to mitigate the threats to this ecoregion? Who is trying to mitigate the threats? What do they hope to achieve? How will this help the ecoregion and humans in the area overall?

PRESENTATION OPTIONS LIST

Power Point: This is your standard power point with slides. You can embed music or videos. You can animate slides to emphasize points or to reveal information.

Photo Story: This program is on your computer (if not you can download it from R.A.P.). You can create a movie using pictures with your voice narrating the story.

Prezi: <http://prezi.com> This is similar to power point but it has a non-linear, 3D format allowing you to zoom in and out into slides or even create a concept map of your topic. You can choose backgrounds, embed movies or other files in to the prezi for added effect.

Glogster EDU: <http://edu.glogster.com> (you will need an access code from your teacher) This website allows you to create an online poster where you can embed movies, web links, podcasts, and text with a lot of really cool backgrounds and graphics to help visualize your idea.

GRADING RUBRIC

Content		Total
Is content correct and complete?	0 1 2 3 4 5 6	
Has content been thought about in a way that goes beyond surface understanding?	0 1 2 3 4 5 6	
Has content been put together in such a way that people understand it?	0 1 2 3 4 5 6	
Presentation		
Were all the “Tasks” covered and explained in detail	0 1 2 3 4 5 6	
Does the text explain the topic without too much information on any one slide/scene?	0 1 2 3 4 5 6	
Do the slides/scenes make sense following one another? Do the slides/scenes appeal to the audience?	0 1 2 3 4 5 6	
Do the graphics support the topic?	0 1 2 3 4 5 6	
Are all works cited in MLA format?	0 1 2 3 4 5 6	
Creativity		
Is the content seen in a new way?	0 1 2 3 4 5 6	
Reflections		
A slide explaining what you learned about the content as you completed this project.	0 1 2 3 4 5 6	
A slide explaining what you learned about yourself as a learner by creating this project.	0 1 2 3 4 5 6	
		/66
Peer Critique		
Review the presentation of 4 other students in class by completing the form provided by teacher.	8.5 points each	/34
Grand Total		/100

RESOURCES THAT MIGHT HELP GET YOU STARTED

<http://www.ucmp.berkeley.edu/glossary/gloss5/biome/>

<http://www.worldbiomes.com>

http://www.blueplanetbiomes.org/world_biomes.htm

<http://www.mbgnet.net>

http://wwf.panda.org/about_our_earth/ecoregions/maps/

http://www.conservation.org/where/priority_areas/hotspots/Pages/hotspots_main.aspx

<http://www.unep-wcmc.org>

<http://www.actionbioscience.org/environment/index.html>

<http://www.actionbioscience.org/biodiversity/>

<http://www.feow.org>

<http://comlmaps.org/how-to/layers-and-resources/boundaries/marine-ecoregions-of-the-world>

<http://www.nature.org>

<http://www.eoearth.org/topics/view/58071/>

ECOREGION CHOICES

Freshwater Ecoregions-Large Rivers
Congo River and Flooded Forests

Freshwater Ecoregions-Large Rivers
Yangtze River

Freshwater Ecoregions-Large Rivers
Colorado River

Freshwater Ecoregions-Large Rivers
Lower Mississippi River

Freshwater Ecoregions-Large Rivers
Amazon River and Flooded Forest

Freshwater Ecoregions-Large Lakes
Lake Biwa

Freshwater Ecoregions-Small Lakes
Lake Inle

Freshwater Ecoregions-Small Lakes
Mexican Highland Lakes

Freshwater Ecoregions-Xeric Basins
Chihahuan Freshwater

Freshwater Ecoregions-Shorelines/
Wetlands/Mangroves
Everglades Flooded Grasslands

Freshwater Ecoregions-Shorelines/
Wetlands/Mangroves
Zambeian Flooded Savannas

Marine Ecoregions-Polar
Antarctic Peninsula and Weddell Sea

Marine Ecoregions-Polar
Bering Sea

Marine Ecoregions-Temperate Shelf and
Sea
Mediterranean Sea

Marine Ecoregions-Temperate Shelf and
Sea

Chesapeake Bay

Marine Ecoregions-Temperate Shelf and
Sea

New Zealand Marine

Marine Ecoregions-Tropical Coral
Great Barrier Reef

Marine Ecoregions-Tropical Coral
Southern Caribbean Sea

Marine Ecoregions-Tropical Coral
Red Sea

Marine Ecoregions-Tropical Coral
Tahitian Marine

Marine Ecoregions-Shorelines/Wetlands/
Mangroves
Sundarbans Mangroves

Marine Ecoregions-Shorelines/Wetlands/
Mangroves
Gulf of Guinea Mangroves

Terrestrial Ecoregions-Moist Broadleaf
Forests
Borneo Lowland and Montane
Forest

Terrestrial Ecoregions-Moist Broadleaf
Forests
Madagascar Forests and Shrublands

Terrestrial Ecoregions-Moist Broadleaf Forests

Atlantic Forests

Terrestrial Ecoregions-Dry Broadleaf Forests

Atlantic Dry Forests

Terrestrial Ecoregions-Moist Broadleaf Forests

Mexican Dry Forests

Terrestrial Ecoregions-Moist Broadleaf Forests

New Caledonia Dry Forests Terrestrial

Ecoregions-Tundra

Alaskan North Slope Coastal Tundra

Terrestrial Ecoregions-Boreal Forests/Taiga

Canadian Boreal Forests

Terrestrial Ecoregions-Boreal Forests/Taiga

Ural Mountains Taiga

Terrestrial Ecoregions-Deserts and Xeric Shrubland

Sonoran Desert

Terrestrial Ecoregions-Deserts and Xeric Shrubland

Namib-Karoo-Kaokeveld Deserts

Terrestrial Ecoregions-Deserts and Xeric Shrubland

Chihuahuan-Tehuacan Deserts

Terrestrial Ecoregions-Temperate Coniferous Forests

Pacific Temperate Rainforest

Terrestrial Ecoregions-Temperate Coniferous Forests

Sierra Nevada Coniferous Forest

Terrestrial Ecoregions-Broadleaf & Mixed Forests

Appalachian Forest

Terrestrial Ecoregions-Broadleaf & Mixed Forests

Tasmanian Temperate Rain Forest

Terrestrial Ecoregions-Mediterranean Forests, Woodland, Scrub

Fynbos

Terrestrial Ecoregions-Tropical/Subtropical Coniferous Forests

Sierra Madre Oriental & Occidental Pine-Oak Forests

Terrestrial Ecoregions-Tropical/Subtropical Coniferous Forests

Mesoamerican Pine-Oak Forests

Terrestrial Ecoregions-Montane Grasslands/Shrublands

Drakensberg Montane Shrublands & Woodlands

Terrestrial Ecoregions-Montane Grasslands/Shrublands

Middle Asian Montane Steppe & Woodlands

Terrestrial Ecoregions-Temperate Grasslands

Northern Prairie

Terrestrial Ecoregions-Temperate Grasslands

Patagonian Steppe

Terrestrial Ecoregions- Tropical Grasslands

Sudanian Savannas