

ACTIVITY 1: Degradation of Habitats

Activity Objective: Research recent forest fire activity in the US and create a graph showing what effect this devastation has had on the degradation of the affected habitats.

Definition: The fragmentation or degradation of a habitat can be man-made or caused by natural occurrences such as fires, weather and volcanoes. This is not a new phenomenon. For example, 300 million years ago changes in climate and weather patterns resulted in the fragmentation of the rainforests in the Eurasia area of the planet. This led to fewer amphibians throughout the rainforest, and the drier atmosphere led to more reptiles. An example of human-caused habitat degradation is deforestation. This is where trees from the planet's forests are removed for a non-ecological use. It can be for a practical purpose such as farming or ranching or can also be for a more harmful use such as harvesting trees without further replanting. This can lead to tree-species extinction and fewer oxygen emissions. It also destroys vital ecosystems where the forests inhabitants rely upon for shelter and food. According to the World Wildlife Foundation (WWF), 1.6 billion people rely on the benefits of forests and 31 percent of the Earth's surface is covered by forests. Over the last 50 years, 17 percent of the Amazon rainforest has been destroyed, lost for good, due to deforestation.

REVIEW VIDEOS:

Discuss habitat degradation/fragmentation; Habitat fragmentation

<https://www.youtube.com/watch?v=PiqICN9T2A8>

Habitat loss motion graphic: <https://www.youtube.com/watch?v=5M3nhb-oXgY>

Why is biodiversity so important (Ted Talk): https://www.youtube.com/watch?v=GK_vRtHJZu4

Materials: Chapter 15, paper, computer, printer. Internet Access MS EXCEL

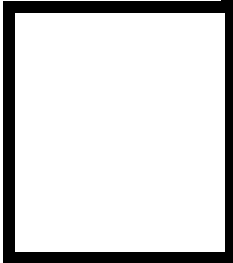
Procedure:

1. Work as partners or small teams.
2. Research and brainstorm recent forest fire activity in the US and the degradation of forests.
3. Based on the text in chapter 15 and your Internet search create a graph showing the results of the loss of forests due to fire and other issues and provide a forecast of the future of our forests.



RUBRIC

4 World-Class Learner	3 Proficient Learner	2 Developing Learner	1 Emergent Learner
Learner at this level has gone beyond mastery of knowledge, skills, & attitudes described in project. World-class learner consistently exhibits high-quality performance.	Learner at this level has had opportunities to apply knowledge, skills, & attitudes of component of project. Proficient learner has mastered essential attributes, thus proving mastery.	Learner at this level has been exposed to & had opportunity to apply knowledge, skills, & attitudes of project. Developing learner may have only a few essential attributes to master before mastery.	Learner at this level may or may not have been exposed to knowledge, skills, & attitudes required by academic standards of the project.



- 1 = Emergent Learner**
- 2 = Developing Learner**
- 3 = Proficient Learner**
- 4 = World-Class Learner**