

Listen

Module 2 - Case

MECHANISMS OF CHANGE AND THE FOSSIL RECORD

Assignment Overview

[Note: If you have trouble viewing some of the course materials, install Quicktime and the Adobe Shockwave Player, both of which can be downloaded free online

at <http://www.adobe.com/products/shockwaveplayer.html> and
<https://support.apple.com/downloads/quicktime>

Mass extinctions are periods in Earth's history when abnormally large numbers of species die out simultaneously or within a limited time frame. The Cretaceous-Tertiary (or K-T) extinction event is probably the best known to many people because it wiped out the dinosaurs, but many other mass extinction events have occurred throughout the history of the Earth. Some of these mass extinction events are even more devastating than K-T. The most severe occurred at the end of the Permian period when approximately 96% of all species disappeared. Many smaller-scale mass extinctions of plants and animals have occurred as recorded in the fossil records. Discover more about Earth's major extinction events below in the following Case Assignment.

Case Assignment

STOP! Before you proceed, make sure that you have read the Home page for this module and followed the links provided there. This assignment requires information from those resources.

Case Part I: Geologic History of Earth

The first part of this assignment requires that you consider the history of extinction on our planet.

From the [Sam Noble Museum](#), answer the following questions:

1. How many major mass extinction periods are listed here? Follow the links from that page to learn more about each period. What caused

each, and which major groups of species disappeared from each period?

Read the article link on Recent Extinctions:

2. Choose two of the [recent extinctions](#) listed on this link and explain why they occurred.

Case Part II: Global Climate Change

Scientists have concerns that human activities are changing our environment at rapid rates that could result in a sixth mass extinction. Let's examine the evidence:

Review the “Recent, Past and Present” section from [Mass Extinctions](#).

Also review the following link from the NASA website:

<https://climate.nasa.gov/causes/>

3. Define greenhouse effect. Describe which gases are important to the greenhouse effect.
4. What were listed as human activities related to greenhouse gas production from each link?
5. How do humans contribute to both climate change and major extinction events?
6. Some scientists think that human activities may be contributing to a sixth mass extinction event. What specific evidence do they site for this possible event? (you may need to conduct additional research to support your findings).

Part III: Drawing Conclusions

Now provide a summary paragraph that explains what conclusions you can make for yourself based on the evidence provided and what you now know about the geologic time scale of the history of the Earth.

Assignment Expectations

Organize this essay assignment using subtitles that summarize the topic from each question above. For example, to answer Question 1, use a descriptive subtitle like the following: **Part I: Geologic History of the Earth/Major Events.**

Answer each question under the subtitle using complete sentences that relate back to the question. Be sure to use APA formatting throughout your essay with 1-inch margins, 12-point type, and double spacing throughout. Include a title page, introduction, answers to the questions with subtitles, and concluding paragraph. Remember to include in-text citations within the body of the essay referencing your resources (e.g., Murray, 2014). Also, be sure to include a reference section at the end of your assignment listing all required readings and any additional resources you used to complete your essay. A helpful guide to writing a quality essay can be found in Trident's [Student Guide to Writing a High-Quality Academic Paper](#). This guide also provides links to example essays written in APA format.

Direct quotes should be limited and must be designated by quotation marks. Paraphrased ideas must give credit to the original author, for example: (Murray, 2014). **Direct copying from “homework help” websites will not receive credit.** Once you have completed your assignment within a Word document, please upload your final version to the Case 2 Dropbox. Please also note your Turnitin originality score and make revisions as needed. Please contact your instructor with any questions.

[Privacy Policy](#) | [Contact](#)