



Text Complexity Analysis of

Which Emits More Carbon Dioxide: Volcanoes or Human Activities? (title)

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Recommended Complexity Band: 9-10

Qualitative Measures

Meaning/Purpose: (Briefly explain the levels of meaning (Literary Text) or purpose (Informational Text.) The purpose of this text is simple: to answer a question about volcanoes vs. human activity. This serves as a good “hook” for readers, and the authors do an excellent job of decisively answering the question.

Text Structure: (Briefly describe the structure, organization, and other features of the text.) The text is well organized by an overall question/answer structure. It is divided into short paragraphs separated by graphics and subheadings, which makes the text easily digestible.

Language Features: (Briefly describe the conventions and clarity of the language used in the text, including the complexity of the vocabulary and sentence structures.) The text includes some complex content and vocabulary (emit, variability, anthropogenic), but many terms and concepts are defined within the text and with added graphics.

Knowledge Demands: (Briefly describe the knowledge demands the text requires of students.) Students need to have a basic understanding of the carbon cycle to comprehend where the carbon is coming from when discussing the large amounts of carbon dioxide in the atmosphere.

Text Description

Briefly describe the text: This informational text resource is intended to support reading in the content area. This article answers the question of whether volcanic activity or human activities contribute more to global warming. With evidence and support, they easily conclude human activities are the heaviest contributor.

Quantitative Measures

Complexity Band Level (provide range): 11-12

The text falls above the 11-12 grade band according to a quantitative reading measure.

Considerations for Reader and Task

Below are factors to consider with respect to the reader and task.

Potential Challenges this Text Poses:

- The content involves many difficult concepts: fossil fuels, carbon sinks, volcanic activity, methane production, etc. A graphic organizer may help to outline the processes.
- Vocabulary terms used throughout may challenge readers, so creating a vocab map will alleviate difficulties.

Recommended Placement

Briefly explain the recommended placement of the text in a particular grade band: The content in this article is entirely appropriate for students in grades 9-10 and aligns well with the science standards for these grades. The quantitative measure seems very high, but because of the text structure and graphic elements, this article is not nearly as difficult as that would seem to indicate.