



## The Big Chill

In class you have learned about the Milankovitch theory of orbitally-forced insolation variations as a probable cause of the earth's many ice ages. Like all other theories there is competition, and it may be that no single theory addresses all of the aspects of earth's glacial past and future. In academic research, the ability to examine competing points of view is critical. The following exercise will have you examine three different points of view regarding earth's ice ages and evaluate for yourself which one presents the best explanation.

### Task

Research three theories that explain the onset of terrestrial ice ages. Write a paragraph that explains the overall topic, and briefly introduces the three theories you are writing about.

Explain each theory fully, but concisely in its own paragraph. Provide details regarding the mechanisms at work, the role of feedback loops if applicable, and information about when, where and by whom the theory was first proposed. Provide parenthetical references (author, year) within your text. Provide full and complete references (MLA format)

Once you have completed the research and writing, compose a final paragraph in which summarize your findings and state which of the three theories you feel is most credible (along with an explanation of why)

Provide a complete works cited.

### Format

For those who have not guessed already, this is a standard 5 paragraph essay. Maximum length is two pages, double spaced, 1" margins, 12 pt font. It should run to about 650 words.

Provide complete works cited in proper MLA format on a third page, as well as a properly formatted cover page.

	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>Format</b>	Obvious attention to details	All correct	Some attention to format	Little attention to format
<b>Works cited</b>	Correct format, no errors	Correct format, minor errors	Correct format Several errors	Missing or incorrect format
<b>Sources used</b>	More than three good sources	3 good sources	Some questionable sources used	Single source or questionable sources
<b>Referencing</b>	Excellent, all material fully and correctly referenced	Proper use of parenthetical references	Some use of parenthetical references	No use of references
<b>Discussion</b>	Exceptional detail, well written	Theory is described in required detail	Theories described in some detail	Theories not fully described or large amount of missing detail
<b>Conclusion</b>	Draws on body of work, provides logical conclusion and demonstrates deep understanding of concepts.	Draws on material presented in the body, makes a logical conclusion.	Makes use of some material from body of work.	Little relation to information presented, weak or no real conclusion.