A Global Warning?

Video Questions

Answer the following questions as you watch the video.

- 1. Have we ever had this much CO_2 in the atmosphere before?
- 2. 250 million years ago there was a massive global warming. How did that affect the number of species of organisms on earth?
- 3. Why is Death Valley a good place for scientists to look for previous cooling?
- 4. Why do scientists refer to a previous time of earth as "snowball earth"?
- 5. When the earth gets whiter, what affect does that have on the temperature? Does that mean is has a high or low albedo?
- 6. What temperature was the dark colored card?
- 7. Why would people not be able to survive if we had another snowball earth?
- 8. In South Africa a scientist looks at layers of rock on a hill. What do the different layers of rock tell him about how the climate changed (the layers are two different colors).
- 9. How did the "flood basalt" (volcanic eruptions) on one part of the world lead to 95% of the species around the world become extinct?
- 10. How much CO_2 did it take to wipe out those species?
- 11. Doubling CO_2 will raise the earth's temperature by how many degrees Celsius?
- 12. What is the significance of methane bubbles being released off of the Santa Barbra coast?
- 13. What is the relationship between the harmfulness of CO_2 vs CH_4 (methane)?
- 14. Why does Helmly use coral to help look at the climate change over the past 200 years?

- 15. Why are scientists concerned about the fact that methane is flammable?
- 16. How could the fact that the earth travels in an elliptical orbit affect the earth's changing climate?
- 17. Based on the theory from #16, should we be heating up or cooling down right now? Is that what's happening?
- 18. How fast is the ice melting?
- 19. How would coastal cities be affected by melting ice caps?
- 20. The last mass extinction occurred how quickly?
- 21. There are many theories as to why this occurred so quickly. Give one theory.
- 22. When did the "little ice age" occur?
- 23. What is the significance of sun spots in relation to the "little ice age"?
- 24. How might sun spots help us now?
- 25. What part of the US is the most volcanically active area (known as a supervolcano)?
- 26. What would be the results of this eruption? How far "past due" is this eruption?
- 27. What greenhouse gas is located under the permafrost in Alaska?
- 28. How much have global temperatures increased since the 1970's? What are the problems associated with this?
- 29. What are things that the video pointed out that humans are doing to increase the amount of greenhouse gases?
- 30. What is the problem with the ocean's waters increasing?
- 31. What do scientists believe will be the biggest problem with a big global climatic change?