GEOL 1130
Spring 2007
Questions for movie: “An Inconvenient Truth”

1. Who was the first person to propose measuring atmospheric CO2 levels?

2. How did Gore know him?

3. What did those first years of measurements indicate to this scientist and how did that affect Al Gore’s life?

4. Why does the CO2 concentration in the atmosphere go up and down each year?

5. List at least three glaciers worldwide that have melted significantly in the last century.

6. Which area supplies drinking water (from glacial melt water) to 40% of Earth’s human population?

7. How far back in time does the Antarctic record of CO2 and air temperature go?

8. In that time, the atmospheric CO2 levels never exceeded what concentration?

9. How do projections of future CO2 levels compare to the Antarctic record?

10. Are the projections of future CO2 levels controversial?

11. Al Gore shows the temperature record from historical times for the last century or so. When did the hottest years in the last century occur?

12. What was the hottest recorded year?

13. Why should we worry about higher ocean temperatures?

14. What does global warming do to global precipitation patterns?

15. What are the two areas Gore says are Earth’s “canary in a coal mine?”
16. How much has Arctic ice decreased in the last 40 years and when is it predicted to be completely absent in the summer?

17. Why is the Arctic ice shelf so vulnerable to warming?

18. If global temperatures rise by 5 degrees F, how much will temperature rise at the equator? At the pole?

19. Provide an example of how global warming could affect an ecological niche.

20. How much faster are species on Earth going extinct than the natural rate of extinction?

21. Do ice sheets and ice shelves melt in a slow, predictable way?

22. If the West Antarctic ice sheet melts, how much would sea level rise? If the Greenland ice sheet melts, how much would sea level rise?

23. Provide two examples of how the combined melting of Greenland and the West Antarctic ice sheet would affect coastlines and the humans that inhabit them.

24. What proportion of global carbon emissions per person comes from the USA?

25. Is there a debate about the link between human’s fossil fuel burning and global warming in the scientific literature?

26. Is there a debate about the link between human’s fossil fuel burning and global warming in the popular press?

27. Why is there a discrepancy between the scientific literature and the popular press?

28. How do US mileage standards compare with those of the rest of the world?

29. What do you think the USA’s a) ability and b) will is to do something to fight global warming?