

Review Sheet for October Test

You do not have to hand this in. Use it to prepare for the test. Also, go to **bengalfrosh.com** to access Benson's site. Look at (read, watch, listen to) the things that are posted for "Unit 2". Be sure to go over all of your handouts (notes, labs, worksheets). Read the questions on those (notes, labs, worksheets) and make sure you understand the answers. The test will be 50 multiple-choice questions.

These questions are WAY more difficult than the multiple-choice questions on the test. So if you can answer these, you are ready for the test!

1. Which of the 4 inner planets has the strongest greenhouse effect? Explain why.
2. What happens to the sunlight absorbed by the Earth's surface?
3. If scientists convince lawmakers that the burning of fossil fuels is making the world warmer, why will it still be difficult to pass laws that minimize carbon dioxide pollution?
4. Give examples of how a campfire transfers heat by each of the following: conduction, convection, and radiation.
5. Explain what the following phrase means: "carbon capture and sequestration".
6. Explain what a "carbon footprint" is and tell why yours is bigger than that of a teen-ager in Africa.
7. Why does a car left in a sunny parking lot get so darn hot?
8. What is the main use of each of the following: oil (a.k.a. petroleum), coal, and natural gas?
9. Why are they called "fossil" fuels?
10. What are the 3 major components of sunlight that reaches the Earth's surface?
11. What is the scientific name for "heat waves"?
12. What greenhouse gas is released by cows when they belch? What are some other sources of this gas?
13. In the "burning up the atmosphere lab", what gas was being used up by the burning of the candle?
14. Why does it get colder as you go up through the troposphere?
15. Why does it get warmer as you go up through the stratosphere (2nd layer up)?
16. What are the two most abundant gases in the air that we breathe?
17. Why is the atmosphere "thicker" closer to the Earth's surface?
18. Which nation emits the most carbon dioxide into the atmosphere?
19. What is the scientific theory that blames the current global warming on human activity called?
20. Which planet has extremely hot days and extremely cold nights because it has no atmosphere?
21. What are three things you could do to reduce your "Carbon Footprint"?
22. Which greenhouse gas is released into lakes in Alaska as permafrost thaws?

23. What kind of night would most likely be colder? Explain why.
 24. List three greenhouse gases.
 25. What does the eastern USA emit so much more carbon dioxide than the West?
 26. Why is the destruction (depletion) of ozone worse over the South Pole than it is over the North Pole?
 27. What was the point of the whipped topping demo?
 28. What is the atom in the chlorofluorocarbon (CFC) molecule that destroys ozone?
 29. What are the 4 factors that contribute to ozone destruction? What is the role of each?
 30. Why are darker-skinned people less likely to develop skin cancer?
 31. What are two other problems (besides sunburn and skin cancer) caused by exposure to UV?
 32. At what time of day would exposure to the sun be the biggest concern in Helena during the summer?
 33. Which CFC is found in the tubes on the back of older refrigerators?
 34. What is ozone and what does it do for us?
 35. During which months is the "ozone hole" present over Antarctica? Explain why it is only those months.
 36. Ozone is important because it blocks 99% of the ???? rays that we receive from the Sun.
 37. Why does the hole form over Antarctica?
 38. One of the major causes of acid rain is the burning of coal that contains too much . . . ?
 39. What is the expensive device designed to remove this pollutant (your answer to the last question) from the emissions at a coal-burning factory or power plant?
 40. How did the Clean Air Act of 1970 affect the amount of coal mined in Montana? Why?
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41. Where are Montana's biggest electricity power plants located?
 42. In what part of the USA is acid rain the biggest problem?
 43. What are the 3 conditions that help a temperature inversion to form in the Helena Valley?
 44. What is a temperature inversion?
 45. Why do we (in Montana) get more direct rays in the summer than in the winter?
 46. What is the definition for "annual temperature range"?
 47. Why does Bismarck have a greater annual temperature range than Seattle?