

OZONE

Go back to <http://formontana.net> and then click on picture # 8. Look at the image and read the explanation below the image.

1. If refrigerators and freezers are thrown away like other stuff, the Freon would escape into our atmosphere. Why would this be bad?
2. The ozone layer protects us from exposure to ultraviolet rays from the sun. List two problems caused by exposure to UV rays from the sun.
3. If you have an older refrigerator in your house it probably has Freon in the tubes that cool the space in the fridge. Newer refrigerators cannot use Freon. When did this law take effect?
4. What did the Environmental Protection Agency discover at the Flathead County Landfill?
5. **Click on the “Whipped Topping . . . “ (Hot Link).** Read through the description of the demonstration and look at the photos (select “click here to see photos of the demo”). When does the hole in the ozone layer happen each year (which 3 months)?
6. Where does it happen?
7. What are the 4 conditions that cause it? Underline the one that is caused by man.
8. The whipped topping represents the atmosphere. What does the pink color in the whipped topping represent?
9. Many people think that having a hole in the ozone layer over Antarctica is not that important because practically no one lives there. What is the point of the demonstration?

GLOBAL WARMING

Go to <http://formontana.net> and then click on picture # 29.

IMPORTANT: The ozone situation and global warming are two separate issues. Many people think that the “hole in the ozone layer” somehow affects, or contributes to global warming. That is NOT TRUE!

10. Grinnell Glacier is located near Lake Sherburne in Glacier Park. Find Lake Sherburne in Glacier Park on your Montana Highway Map. What river does Sherburne drain into?

11. What is the point of showing the two photos side by side?

12. There is little doubt that the world is getting warmer (global warming). However many non-scientists still dispute the cause of this warming. What type of human activity do most scientists think is the cause?

13. According to the greenhouse theory, certain gases are causing global warming. Carbon dioxide is one of those greenhouse gases. Explain how these gases make the world warmer.

14. Explain why carbon dioxide molecules allow light to enter our atmosphere, but don't let infrared waves (heat waves) escape back out to space?

15. List 3 things you have done in the last 24 hours that have caused each of the following fossil fuels to be burned. NOTE: About half of the electricity we use in Montana comes from coal-fired generators.

Oil (petroleum):

Natural Gas:

Coal:

16. Does the “hole in the ozone layer” contribute to global warming?

IMPORTANT REMINDER

As Mr. Benson returns corrected assignments to you, keep them in a folder in the classroom where you are working. Have the supervising teacher keep the folder for you. If there is any question as to whether or not you completed an assignment, you will have the folder as proof. You will need to give the folder (with all of the worksheets) to Mr. Benson at the end of the course before credit is given.