

Show What You Know for the Atmosphere Test

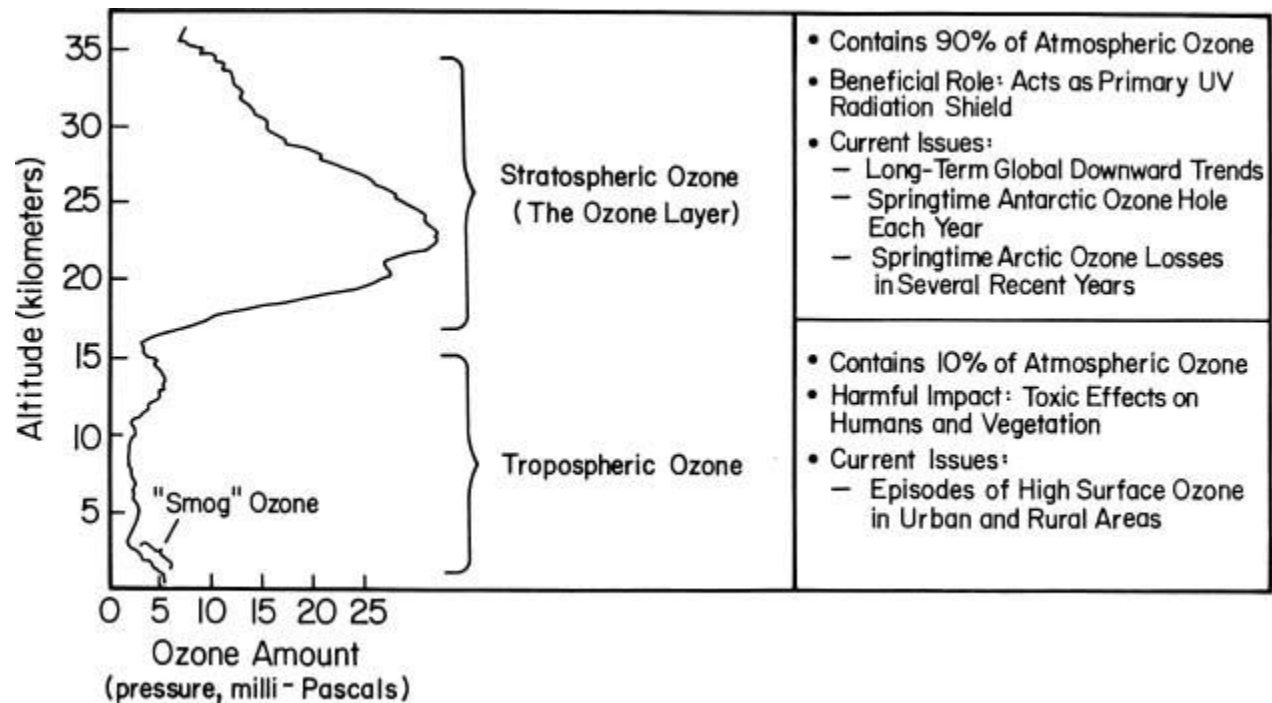
1. What is the relationship between altitude and density of air?
2. Would it be more difficult to breathe at in the Sahara Desert or the top of Mount Everest? Why?
3. According to Bill Nye, where is there more pressure - the Sahara Desert or the top of Mount Everest? Why?
4. What are the gases found in the atmosphere? List them in order from most abundant to least with the percentages.
5. What are three "SUDDEN CHANGES" that can happen to change the composition of the atmosphere?
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6. What particles can be found in the atmosphere?
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7. What are two ways the atmosphere supports life?
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8. What is ozone? How can it be both 'good' and 'bad'?
9. What and where is the ozone layer? From what form of radiation does it protect us?

10. Complete the chart below in order beginning with the layer closest to Earth's surface.

Layer Name	What does the name mean?	2 Facts

11. What concern do scientists have with the ozone layer? What is one cause of this concern?

The following graph measures the amount of ozone in the atmosphere. Use the graph to answer the following questions.



12. At which altitude do you find smog ozone?

13. What percent of ozone do you find in the stratosphere where the ozone layer is found?

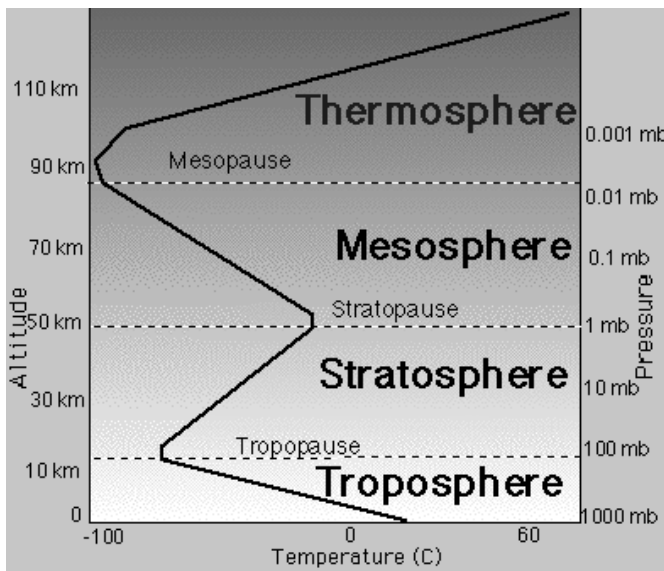
14. What are the effects of tropospheric ozone?

15. At which altitude does stratospheric ozone peak?

16. How is the amount of ozone measured in this graph?

17. What are some current issues with stratospheric ozone?

The graph below shows the temperatures of the atmosphere in each layer. Use the image below to answer the following questions:

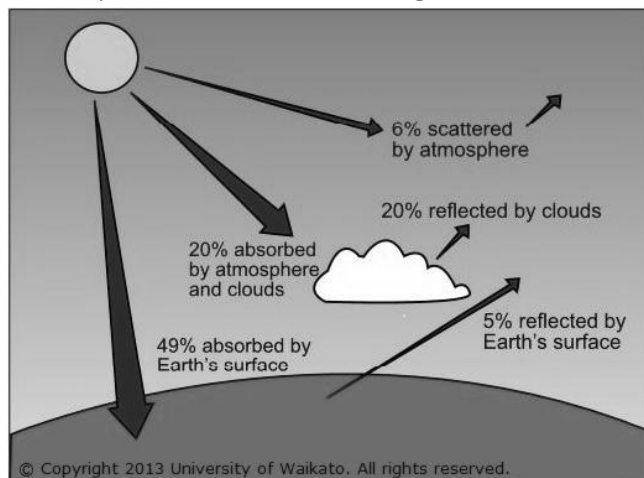


18. In which layer do you find the lowest temperatures?

19. The temperature drops with higher altitudes in the troposphere. How does the temperature change in the stratosphere?

20. Why do you think the temperature gets so warm at the top of the thermosphere?

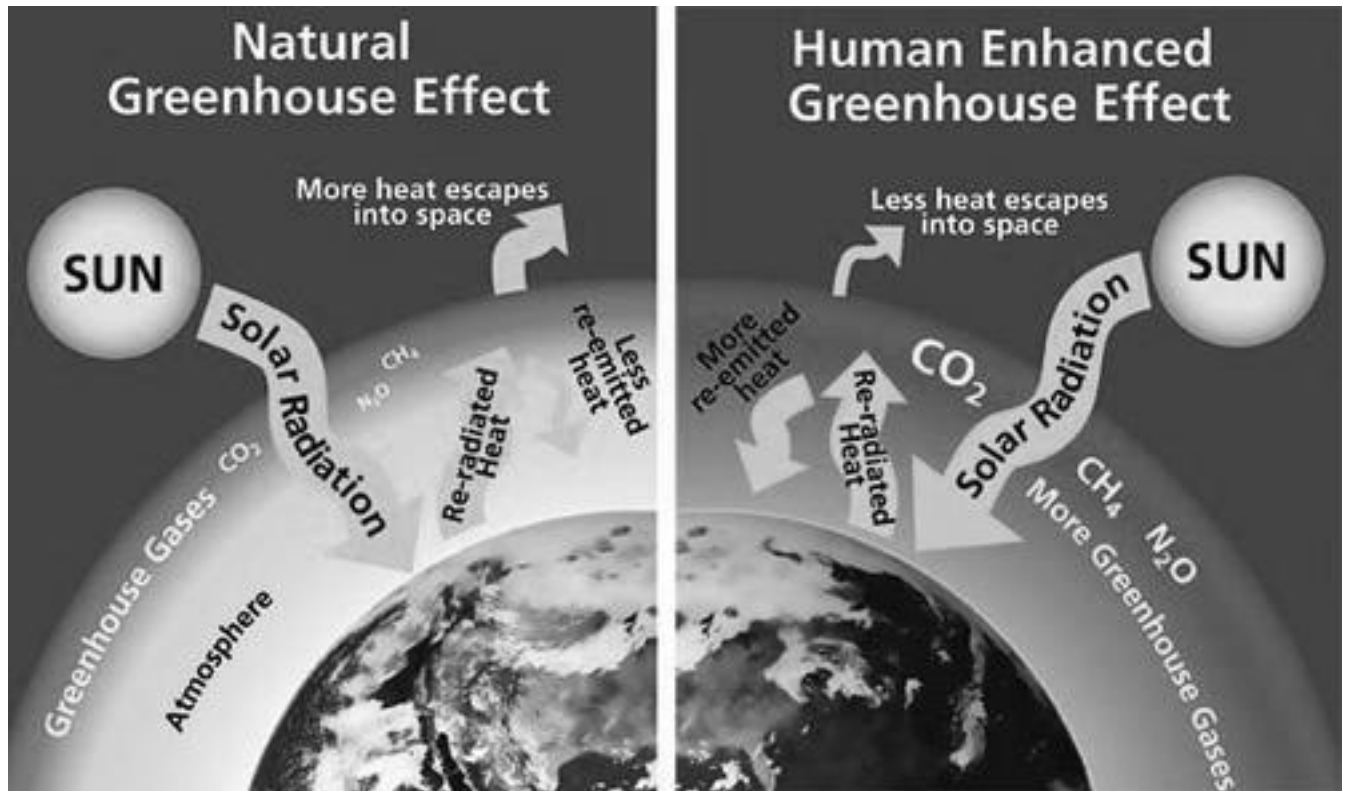
The following illustration shows what happens to the Sun's energy when it enters our atmosphere. Use the image to answer the following questions.



21. According to this diagram, list three ways the Sun's energy interacts with Earth and its atmosphere.

22. According to this diagram, what percent of the Sun's energy never reaches Earth's surface?

The following diagram illustrates the greenhouse effect that occurs naturally and because of human actions. Use the diagram to answer the following questions.



23. What greenhouse gases are identified in this diagram?

24. What is an important similarity between the two images?

25. Identify **two** important differences between the two greenhouse effects.