Na	amePeriodDate	
	The Atmosphere Review	
P	lease answer each question completely. Remember that these questions are to help you go back to your notes and assignments to study. Having a couple words or an answer is not going to prepare you for the FFLA.	
1. Draw a pie chart showing the relative amount of the top gases in our atmosphere.		
2.	What is the source of energy in the atmosphere?	
3.	How is Earth's atmosphere heated?	
4.	What is albedo?	
5.	What is the difference between water and land in the way they interact with the sun's energy?	
6	How does the energy from the sun move throughout the Earth's atmosphere?	
7.	What is short-wave radiation?	

a. What are some examples?

8. What is long-wave radiation?

a. What are some examples?

Describe the role that each of the following words plays in heating the Earth's atmosphere.
a. Reflection

b. Absorption

10. What are the possible results of the Earth's energy budget changing?

11. How does the greenhouse effect work in the atmosphere?

12. Name 3 major greenhouse gases? a.

b.

с.

13. Why is the greenhouse effect so important on Earth?

14. Draw a diagram showing how the Earth and Sun are configured during our winter, spring, summer, and fall. 15. How does energy from the sun differ from season to season? 16. Why are the seasons different in the northern vs. the southern hemisphere? 17. What causes wind? 18. What effect can the absorption of the sun's energy have on the motion of the air in the atmosphere? 19. What is the Coriolis Effect?

20. How do land and sea breezes work?

21. What is ozone?

22. How can ozone be both good and bad? a. Good

b. Bad

23. Why are scientists concerned about ozone in the troposphere and in the stratosphere? a. Troposphere

b. Stratosphere

24. If you have an enclosed sample of air, what are three ways you can change its pressure? a.

b. c.

25. What were the features of weather we talked about and what tools are used to measure them? a. Temperature

b. Air Pressure

c. Relative Humidity

d. Wind Speed

26. What's the relationship between temperature and relative humidity? 27. What's the connection between air pressure and weather? 28. How do we use air pressure to predict future weather? 29. How do you recognize high and low pressure systems on a satellite map? a. What's the difference between high and low pressure systems in the southern and the northern hemispheres? 30. Describe the following different types of fronts. Include a description of weather that is associated with each and how the air masses interact with each other. a. Warm b. Cold c. Stationary d. Occluded

How do you recognize a warm, cold, stationary, and occluded front on a weather map?
a. Warm

b. Cold

c. Stationary

d. Occluded

32. Compare and contrast weather and climate.

Describe the 6 climate factors that can impact a city's temperature.
a.

- b.
- с.
- d.
- е.
- f.

34. Describe the 5 climate factors that could control the amount of precipitation a city receives. a.

b.	38. How has the carbon cycle changed dramatically over the past 150-200 years?	
с.	39. Describe the air pollution problems of Utah.a. Summer	
d.		
e.	b. Winter	
35. What concern do scientists have with the changing greenhouse effect?	n the changing greenhouse effect? 40. What evidence is there that the Earth's temperature has increased since the beginning of the industrial revolution?	
36. What are the primary reservoirs of carbon in the carbon cycle? a.		
b.		
с.	41. What connection do scientists think there is between the warming of Earth's climate and the carbon cycle?	
d.		
e.	42. Name the possible ways that Earth's climate has changed over time.	

37. What processes are involved in moving carbon from one reservoir to another in the carbon cycle?

a. How have scientists been able to decide which one is primarily responsible for modern climate change?