

## Atmosphere Unit Remediation

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

Go to this website: <http://www.uen.org/core/science/sciber/sciber9/index.shtml>

Click on the Atmosphere link in the middle of the page. Because you scored lower than proficient on the Atmosphere Unit Test, you will need to read through the following sections of this online text from the Utah Core for Earth Science and answer the questions in order to try and learn more about the topics of this unit. *The last day this remediation packet will be accepted for a grade change is Friday March 9, 2018*

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

Original Unit Test Score \_\_\_\_\_%

### Utah Sci-ber Text

#### You Are My Sunshine

1. Describe what can happen to sunlight when it strikes the earth.
2. Looking at the map, how does the energy striking the earth shift from January to April?

#### The Greenhouse Effect

3. What is a good definition of the atmosphere?
4. How is the earth's atmosphere kind of like a greenhouse? How is it different?
5. What are some of the most common greenhouse gases on Earth?
6. Why is carbon dioxide one of the most important greenhouse gases if it is not even as powerful as many other greenhouse gases?
7. Watch the video at the bottom of the page. What are the greenhouse gases?

#### Have Humans Changed the Carbon Cycle?

8. What is the carbon cycle?
9. How have humans influenced the amount of carbon dioxide in the atmosphere during the last 200 years?
10. What is deforestation? How does it affect the carbon cycle?

### **Air Pollution**

11. What is the major cause of outdoor air pollution?
12. Describe three examples of air pollution generated by fossil fuel burning.
13. What is acid rain? How does it affect our environment?

### **Energy and Latitude**

14. Why is the sun's energy not spread evenly over the earth?
15. Why does the equator warm up more than the poles?
16. How does the uneven heating of earth's surface affect the circulation of the atmosphere?
17. Answer the practice and review questions at the bottom of the page. Then, check your answers.

### **Atmospheric Circulation**

18. How does convection in the atmosphere create areas of high and low pressure?
19. What is the Coriolis effect and what causes it?

20. How many wind belts (convection cells) are formed in the northern hemisphere? What are their names and locations?

### **What Causes Weather?**

21. What is an air mass?

22. What determines the characteristics of an air mass?

23. Define a weather front.

24. Diagram and describe the following fronts: warm, cold, and occluded.

### **Forecasting the Weather**

25. List the weather instruments used to measure the following: air pressure, air temperature, humidity, wind speed, and wind direction.

**I feel a storm comin'**

26. After reading about severe weather on this page, describe how severe weather impacts our society. Also, answer the questions at the bottom of the page and check your answers.

### **In the Ozone**

27. What is ozone?

28. Why is ozone good in the stratosphere but bad in the troposphere?

### **Oh yea...how ya gonna prove it?**

29. What is the difference between weather and climate?

### **How Earth's Climate Has Changed**

30. Describe at least four things that could have a long-term effect on Earth's climate.

### **What does it mean?**

31. After reading this page and studying the data table, answer the questions and write your answer below