

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

## Atmosphere Scavenger Hunt Worksheet

You will use the following websites to answer questions (This is an individual activity)

Part 1 -

<http://www.pbs.org/wgbh/nova/balloon/science/atmosphere.html#troposphere>

1. What is the atmosphere?

2. How high does the atmosphere extend from the earth?

3. What are the five layers of the atmosphere?

1.

2.

3.

4.

5.

4. What are the three main gases that make up the atmosphere? Be sure to list the percentages for each gas.

1.

2.

3.

5. In which layer of the atmosphere does weather occur?

6. Does the temperature rise or drop in the troposphere? \_\_\_\_\_

Does the temperature rise or drop in the stratosphere? \_\_\_\_\_

Does the temperature rise or drop in the mesosphere? \_\_\_\_\_

Does the temperature rise or drop in the thermosphere? \_\_\_\_\_

## Part 2 –

“The Ozone Layer”

[http://www.ducksters.com/science/environment/ozone\\_layer.php](http://www.ducksters.com/science/environment/ozone_layer.php)

Scroll down to the section titled “Atmospheric Processes” and answer this question.

7. What is ultraviolet radiation?
8. Where is the ozone layer located?

## Part 3 –

This should be the NOAA website. Answer the following questions. 10. In what layer do space shuttles fly?

11. Which layer of the atmosphere is the coldest? \_\_\_\_\_

Which layer of the atmosphere is the hottest? \_\_\_\_\_

12. Click on the ionosphere link. Where is the ionosphere located?
13. What important quality does the ionosphere have?
14. What is the exosphere?
15. What is the boundary between the troposphere and stratosphere called?  
\_\_\_\_\_

What is the boundary between the stratosphere and mesosphere called?  
\_\_\_\_\_

What is the boundary between the mesosphere and thermosphere called?  
\_\_\_\_\_

Layers of the Atmosphere

<https://www.nesdis.noaa.gov/content/peeling-back-layers-atmosphere>

16. In what layer do weather balloons fly?

17. Where do planes and jets fly?
18. Why do meteors burn up in the mesosphere?
19. Where do the auroras occur?
20. Where do space shuttles fly?

#### Part 4 –

“Global Warming”

<http://climatekids.nasa.gov/greenhouse-effect/>

This should take you to a page titled “What is the Greenhouse Effect?” - Answer the following questions.

21. What is the greenhouse effect?
22. Is the greenhouse effect always a bad thing? What could make it a bad thing?
23. Are humans causing the increase in greenhouse gases? How?
24. What can we do to stop this?

[http://alkisites.vansd.org/dgray/Assignments/conduction\\_convection\\_radiation\\_reading.pdf](http://alkisites.vansd.org/dgray/Assignments/conduction_convection_radiation_reading.pdf)

25. Conduction is how heat transfers through direct \_\_\_\_\_ A. \_\_\_\_\_ with objects that are \_\_\_\_\_ B. \_\_\_\_\_.

A.

B.

26. Convection currents explain why the air is hotter at the top of a room and cooler at the bottom. Convection currents also explain why water is warm at the top of the ocean, but gets colder as you swim deeper. (True or False)

27. Radiation is how heat moves through places where there are \_\_\_\_\_.