**Name:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Meteorology Webquest....

**Directions:** Complete the webquest!

<http://www.thefreedictionary.com/meteorology>

What is the definition of meteorology?

<http://www.windows2universe.org/earth/Atmosphere/overview.html>

What is the atmosphere?

What percentage of each gas makes up the atmosphere?

Define Weather:

Define Temperature:

**The atmosphere is divided up into 5 layers. For each layer list 3 important characteristics. Also define included vocabulary words for some layers.**

Troposphere:

Tropopause:

Stratosphere:

Ozone Layer:

Mesosphere:

Thermosphere:

<http://www.windows2universe.org/earth/Atmosphere/ionosphere.html>

Ionosphere:

What 2 things are possible because of the ionosphere?

Aurora:

<http://www.windows2universe.org/earth/Atmosphere/exosphere.html>

Exosphere:

<http://ww2010.atmos.uiuc.edu/(Gh)/guides/mtr/fw/prs/def.rxml>

What is air pressure?

What units are used to measure air pressure?

What is a barometer?

<http://www.usatoday.com/weather/wbaromtr.htm>

How does a mercury barometer work?

What is an aneroid barometer? How is it different from a mercury barometer?

<http://www.eoearth.org/article/Albedo>

1. What is the definition of albedo?
2. What has an albedo of 100%? 0%?
3. Use the table of reflectivity to give examples of things with low, medium and high albedos.

<http://www.wisc-online.com/objects/ViewObject.aspx?ID=SCE304>

1. Click on the begin link and then click on Radiation. Define Radiation.
2. Click on the link for Conduction, define conduction.
3. Click on the link for Convection, define convection.

<http://www.sciencemadesimple.com/sky_blue.html>

1. Scroll down until “why is the sky blue”. Describe why the sky appears blue.
2. Why does the sun appear white if you are in space?
3. Why is the sunset red?

<http://earthguide.ucsd.edu/earthguide/diagrams/greenhouse/>

1. Describe the greenhouse effect in 4 steps. Begin with the step when solar energy first moves through the earth’s atmosphere.

<http://www.propertiesofmatter.si.edu/Density_Creates.html>

1. How is the convection in the room like the convection of wind?

<http://serc.carleton.edu/details/images/10044.html>

1. Draw a blank globe on this page. Draw lines for 0, 30, 60 and 90 degrees of latitude in the North and the South).

* Draw in the convection cells that move between the latitudes and include the direction of the winds on the surface of the earth.
* Label the NE and SE Trade winds, Easterlies, Westerlies, Doldrums and Horse Latitudes.

<http://www.uwf.edu/atc/projects/coriolis/main.swf>

1. Use this website to describe the coriolis effect. Describe below. When you are complete, move through the rest of the webpage and take the quiz at the end. This page is really helpful!

<http://www.pbs.org/wgbh/nova/vanished/jetstream.html>

1. Click on “giving rise to the jet stream”. Move through the animation. Sum up what causes the jet stream in 2-3 broad sentences.
2. Now click go to the above link again and click on “jet stream FAQ”.

How would you define jet stream?

At what altitude does it occur?

Length/width/thickness?

Does it affect weather?

Does the jet stream always travel from the west to the east?

<http://www.classzone.com/books/earth_science/terc/content/visualizations/es1903/es1903page01.cfm>

Describe and diagram the following.

Land Breeze:

Sea Breeze:

<http://www.kidsgeo.com/geography-for-kids/0099-mountain-valley-breezes.php>

Describe and diagram the following.

Valley Breeze:

Mountain Breeze: