

Unit Activities: Weather Variables

Name:

Block:

Unit Objectives

- Use and interpret weather station models.
- Understand the relationship between weather variables.
- Be able to use various weather instruments and charts.
- Recognize the cause of precipitation.

Notes

(checked at end of quarter)

- 1 _____ Air Pressure and Wind
- 2 _____ Locations of Clouds and Precipitation
- 3 _____ Midlatitude Cyclone
- 4 _____ Dew Point and Relative Humidity

Base Assignments

(underlined assignments are mandatory)

-----Assignment 1: Due / / -----
5 points

- 5 _____ Lab: Station Model

-----Assignment 2: Due / / -----
Choose 10 points

- 6 _____ Flash Cards: (5 points) create flash cards using the following words- anemometer, barometer, weather station model, pressure gradient, dew point, relative humidity, air pressure, density, Coriolis Effect
- 7 _____ Concept Map: (5 points) create a map using the following words- pressure gradient, dew point, relative humidity, air pressure, density, Coriolis Effect, millibar, temperature, wind. You may do this on a sheet of paper or use the program "Inspiration" available on any school computer.
- 8 _____ Create a web page: (5 points) the page should include information from one of the lectures from this unit. Be sure to include graphics and links as described in the rubrics.
- 9 _____ Book Work: (5 points) Read or listen to Weather Analysis on Pp. 312-321 and complete Study Guide 12-3/12-4.
- 10 _____ Earthweek: (5 points) go to the Weather Variable Unit on the class web site and follow the Earthweek link and download "This Week's" map. Write down at least 3 events from the map that are weather related. For each event explain how at least 3 weather variables most likely changed just prior to the event taking place.
- 11 _____ Create a Video Forecast: (5 points) use current weather maps, local data, and web sites to develop a forecast for the next few days. Record yourself and a team member delivering the forecast. Be sure the video includes a weather map and that you provide a reason for the weather you are predicting.
- 12 _____ Create a Weather Poem: (5 points) write a poem that uses at least 10 weather-related words.

-----Assignment 3: Due / / -----
3 points

- 13 _____ Dew Point and Relative Humidity

-----Assignment 4: Due / / -----
5 points

- 14 _____ Lab: Determining Dew Point

-----Assignment 5: Due / / -----
5 points

- 15 _____ Lab: Density of Air

-----Assignment 6: Due / / -----
5 points

- 16 _____ Lab: Weather Log

-----Assignment 7: Due / / -----
5 points

- 17 _____ Lab: Weather Relationships

Problem Solving Assignment

5 points

- 18 _____ How Do Clouds Form?