Unit Concept Matching

Directions: Match the statements to the right with the correct term or concept on the left. Some statements are used more than once.

Ozone Layer _____

mT and cP _____

Air Mass _____

Troposphere _____

The Coriolis Effect _____

Fast Winds on a Map _____

Prevailing Westerlies _____

Temperature Changes _____

Wind _____

Low Pressure System _____

Isobars _____

Temperature _____

Jet Stream _____

Isotherms_____

High Pressure System _____

Relative Humidity _____

Insolation _____

Humid _____

Station Model _____

Tornado _____

Weather Fronts _____

Clouds _____

Altitude _____

Air Pressure _____

Convection _____

Hurricane _____

Dew Point Temperature _____

1. The reason why the atmosphere is divided into different layers.
2. Found in the stratosphere. Absorbs ultraviolet radiation protecting us on the surface and creating a warming effect in the stratosphere.
3. Where we live. All weather events occur in this sphere.
4. Heat energy transfer in fluids (liquids and gases) by differences in density. Causes wind.
5. Caused by the Earth's rotation. Causes surface winds to deflect to the right in the Northern Hemisphere leading to the Prevailing Westerly winds for the USA.
6. Incoming Solar Radiation. Short wavelength as visible light.
7. Standard abbreviated format used to show weather data on a map. See ESRT pg. 13
8. The temperature at which air is saturated with moisture and condensation begins. Measured with a psychrometer.
9. Average speed of moving molecules. Measured with a thermometer.
10. The weight of air. Measured with a barometer.
11. Caused by the uneven heating of Earth, convection and the Coriolis Effect. Measured with an anemometer and a wind vane. Named for where they come from.
12. Isobars are close together.
13. Connect points of equal air pressure on a weather map.
14. Connect points of equal air temperature on a weather map.
15. Warmer, humid, low density air that is rising, rotating counterclockwise and moving inward. Leads to a drop in barometric pressure. Associated with bad weather. Weather fronts connect here.
16. Cooler, dry, high density air that is sinking, rotating clockwise and moving outward. Leads to an increase in barometric pressure. Associated with nice weather.
17. How "full" the air is with moisture. Because warmer air holds more moisture, it varies with changes in temperature.
18. When there is lots of water vapor in the air.
19. A body of air that has similar temperature and humidity throughout and is based on the place of origin – over land=continental, over water=maritime.
20. Boundary between air masses.
21. Suspended liquid droplets in the troposphere. Forms by rising warm, humid air that expands and cools to the dew point and condenses on particles of dust.
22. Band of fast moving air in the upper troposphere moving west to east.
23. Global wind belt of the USA; helps move weather across the US west to east.
24. Massive low pressure storms that form in the tropics in the late summer/early fall and last for days. Greatest destruction is due to storm surge and high winds.
25. Short lived, small rotating winds of great speeds typically associated with cold fronts and thunderstorms. Occur in the spring time in the US Great Plains. Greatest destruction is wind damage.
26. The height above the ground surface in the atmosphere. Unlike elevation which is a height of land above sea level.
27. Types of air masses that usually interact to create fronts and changing weather in NYS.