

ANSWER KEY

Unit Concept Matching

Directions: Match of the statements to the right with the correct term or concept.

Some statements are use more than once.

Ozone Layer 2
mT and cP 27
Air Mass 19
Troposphere 3
The Coriolis Effect 5
Fast Winds on a Map 12
Prevailing Westerlies 23
Temperature Changes 1
Wind 11
Low Pressure System 15
Isobars 13
Temperature 9
Jet Stream 22
Isotherms 14
High Pressure System 16
Relative Humidity 17
Insolation 6
Humid 18
Station Model 7
Tornado 25
Weather fronts 20
Clouds 21
Altitude 26
Air Pressure 10
Convection 4
Hurricane 24
Dew Point Temperature 8

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. Zone where air masses collided and interact. Ex. Cold front, warm front.
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. (ex. Mountain top)
27. Types of air masses that usually interact to create fronts and changing weather in NYS.