

METEOROLOGY VOCABULARY

| | | |
|--|-----------------|-----------------------|
| Troposphere | ozone CFC | radiation |
| Stratosphere | UV radiation | insolation |
| Mesosphere | aurora borealis | temperature inversion |
| Thermosphere | Northern lights | isotherms |
| “pauses” | “Ozone hole” | specific heat |
| Ionosphere | conduction | latent heat |
| Green house effect Greenhouse gases | convection | |

**Know what increasing altitude does to temperature for each of the atmospheric layers (ERST)

**Know what increasing altitude does to pressure does for each of the layers

**Understand how technology has affected both the Earth’s global temperatures

** Understand how technology has affect the Earth ozone layer

** Be able to convert Celsius to Fahrenheit w/ ESRT table

** Know how color and texture (shiny vs dull) affects absorption ability

** be able to explain why water heats slowly vs soil

** be able to give examples of conduction, convection and radiation

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|-------------------|-----------|---------------------|-----------|
| evaporation | dew | cumulus | dew point |
| condensation | fog | nimbus | radiation |
| relative humidity | frost | alto | |
| psychrometer | advection | cirrus | |
| dry bulb | cirrus | condensation nuclei | |
| wet bulb | stratus | base level (cloud) | |

*Know where energy is absorbed and given off when phase changing (particularly water)

**Understand there are symbols to represent the amount of cloud cover (pg 511)

**Be able to use the dew point and relative humidity charts in the ESRT.

**Be able to read and use a psychrometer

**Be able to identify what happens to relative humidity and dew point when temperatures rise or fall.

** Be able to identify major clouds

| | | | |
|---------------------|------------------------|---------------------------------------|-------------------|
| rain shadow | acid rain | sulfuric acid | carbonic acid |
| air pressure | millibar | inches of Hg | high pressure |
| low pressure | pressure gradient | wind | sea / land breeze |
| Coriolis Effect | global wind belts | wind vane | anemometer |
| Doldrums | horse latitudes | ITCZ - intertropical convergence zone | |
| Trade winds | prevailing westerlies | monsoons | jet stream |
| Air mass | maritime tropical (mT) | continental tropical (cT) | |
| Maritime polar (mP) | continental polar (cP) | rawinsonde | |
| Warm front | cold front | occluded front | stationary front |
| Cyclone | thunderstorm | lightening | tornado |
| Hurricane | storm surges | weather models | |

**Be able to explain acid rain and why New York has this issue

**Be able to read a barometer, be able to transfer between millibars and inches of Hg

**Be able to calculate pressure gradient

**Be able to identify the direction of wind given pressure readings

**Be able to identify air movement in low and high pressures systems

**Be able to identify air movements in warm and cold fronts

**Be able to identify low and high pressure systems on a global drawing

** Be able to identify the global air motion at a particular latitude

** Be able to draw isolines for temperature, pressure, precipitation

** Be able to track a system over a USA map

**Be able to roughly forecast the weather according to a weather map

**Be able to draw air movement for land and sea breezes

**Be able to identify safety behaviors for tornados and hurricanes

**Be able to identify the current weather using weather map station symbols