

Name _____

Date _____

Period _____

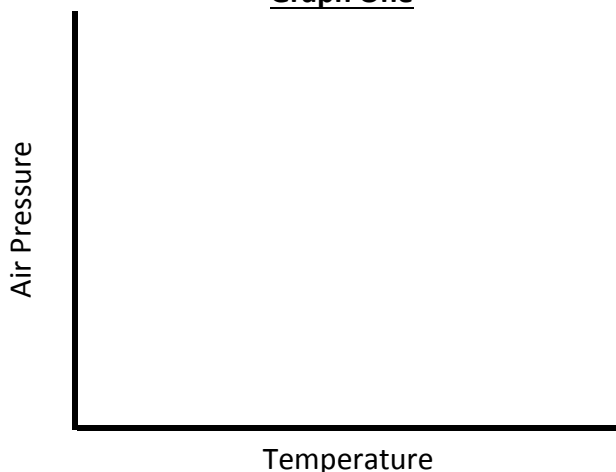
Weather Relationships (1:55) Hommocks Middle School

<https://www.youtube.com/watch?v=PssZKFILOeM&list=PL37057D7BFD1608CB&index=47>

This video describes 15 different weather relationships. (Plus 1 bonus!)

For each relationship, describe how the variables change in words,
then sketch the graph and fill in the blanks in the statements.

Graph One

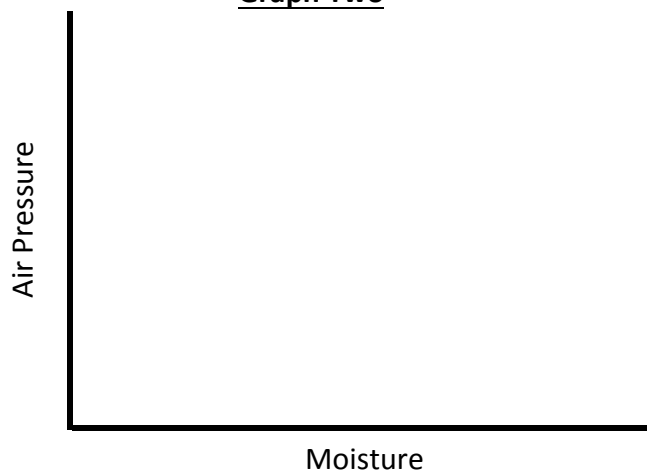


As Temperature decrease

_____ increases.

Cold air is _____ pressure than warm air.

Graph Two

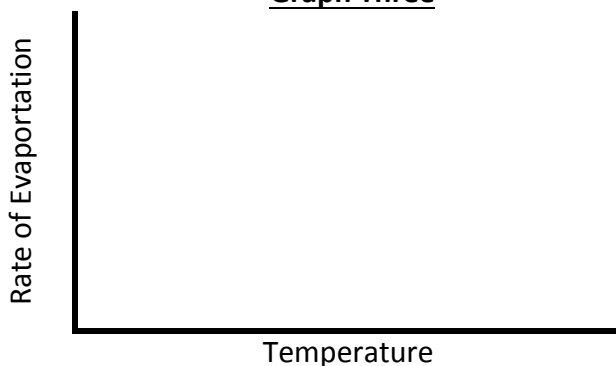


As moisture decrease

_____ increases.

Dry air is _____ pressure than moist air.

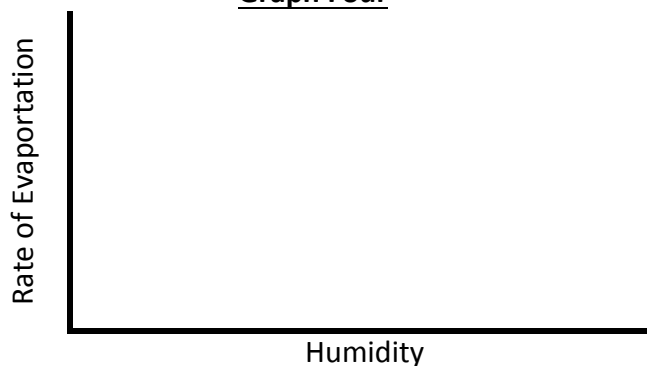
Graph Three



As Temperature increases the Rate
of Evaporation will _____.

Warmer air causes _____ evaporation.

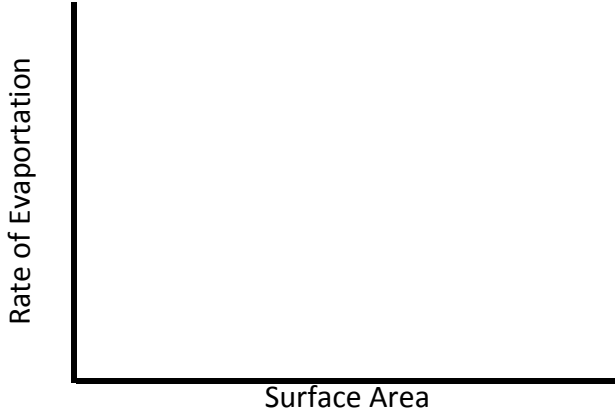
Graph Four



As Humidity increases the Rate
of Evaporation will _____.

Dry air causes _____
evaporation than moist air.

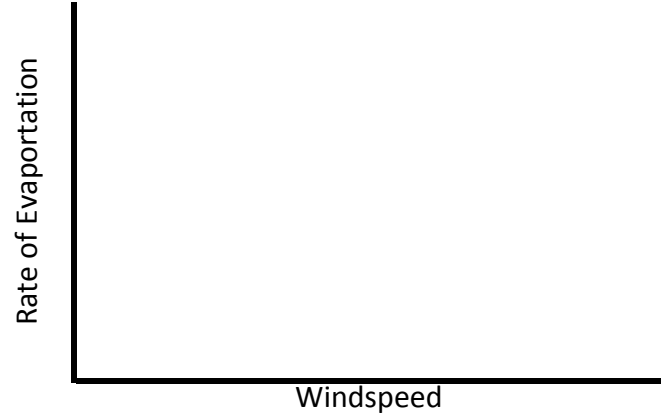
Graph Five



As Surface Area increases the Rate of Evaporation will _____.

Spreading water out will cause _____ evaporation.

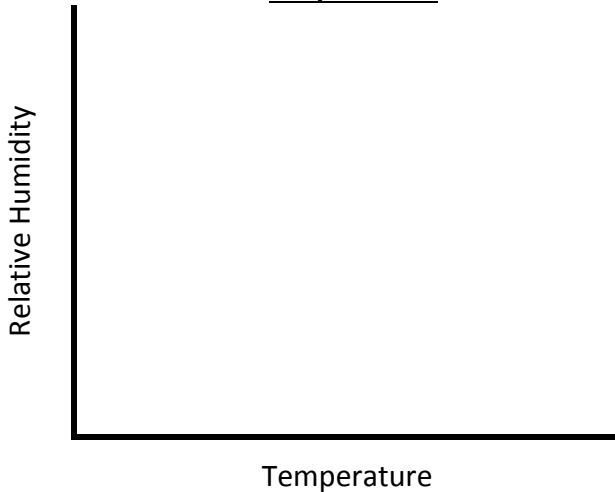
Graph Six



As Windspeed increases the Rate of Evaporation will _____.

Windier conditions cause _____ evaporation.

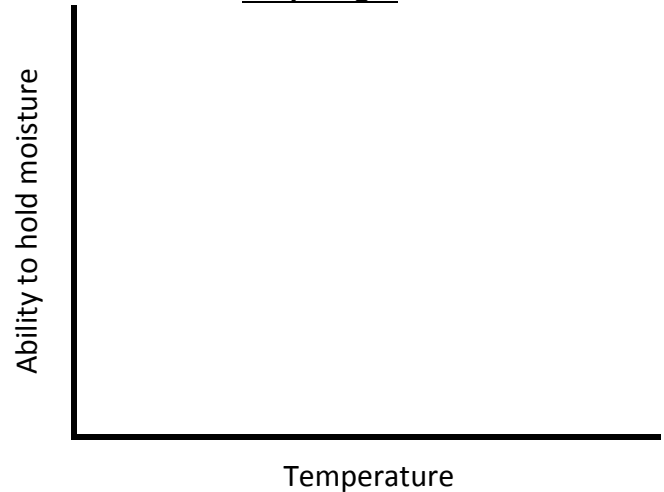
Graph Seven



As Temperature increases Relative Humidity _____.

Increasing air temperature will cause the air to become _____ saturated.

Graph Eight



As temperature increases the Capacity for moisture _____.

Hotter air is capable of holding _____ water vapor. (_____ capacity)

Graph Nine

Air Density

Temperature

As Temperature increases, Air Density

Hotter air is _____ dense and will
have _____ air pressure.

Graph Ten

Windspeed

Pressure Gradient

As the Pressure Gradient increases, the
windspeed _____.

A higher pressure gradient will cause
_____ winds.
(Isobars will be _____ together.)

Graph Eleven

Chance of Precipitation

Difference between Air Temperature
and Dew Points

As the temperature and dew point get closer together
(smaller difference), the chance of precipitation will

Graph Twelve

Chance of Precipitation

Difference between Wet Bulb and Dry Bulb

As the wet bulb and dry bulb temperatures
get closer together (smaller difference)
the probability of precipitation will

Relative humidity will _____.

Graph Thirteen

Air Temperature

Carbon Dioxide Concentration

As Carbon dioxide concentration increases, air temperature _____.

Increasing global CO₂ levels (ppm) will cause global temperatures to _____ because CO₂ absorbs _____.

Graph Fourteen

Air Pressure

Elevation

As elevation increases, air pressure will _____.

As you move up a mountain (elevation increases) the air pressure will _____.

Graph Fifteen

Water Vapor

Elevation

As elevation increases, water vapor concentration will _____.

The amount of water vapor will _____ as you move up a mountain.

Graph Sixteen

Wind Speed

Distance between Isobars

As the distance between isobars increases the windspeed will _____.

Closer isobars = _____ winds.

Far apart isobars = _____ winds.

Note - Graph 16 is not mentioned in the Video