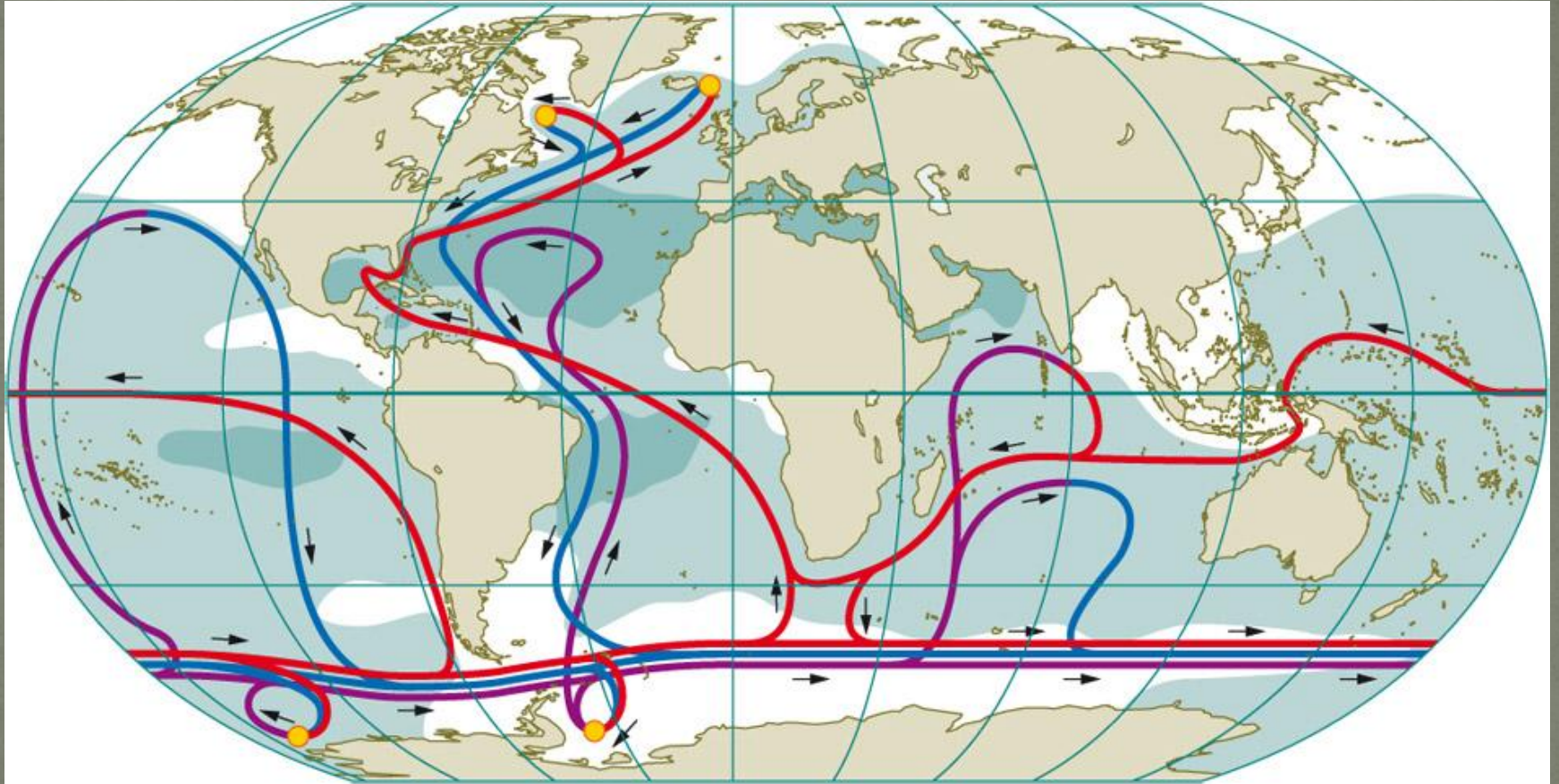


# How Do the Oceans and the Water Cycle Affect Weather?

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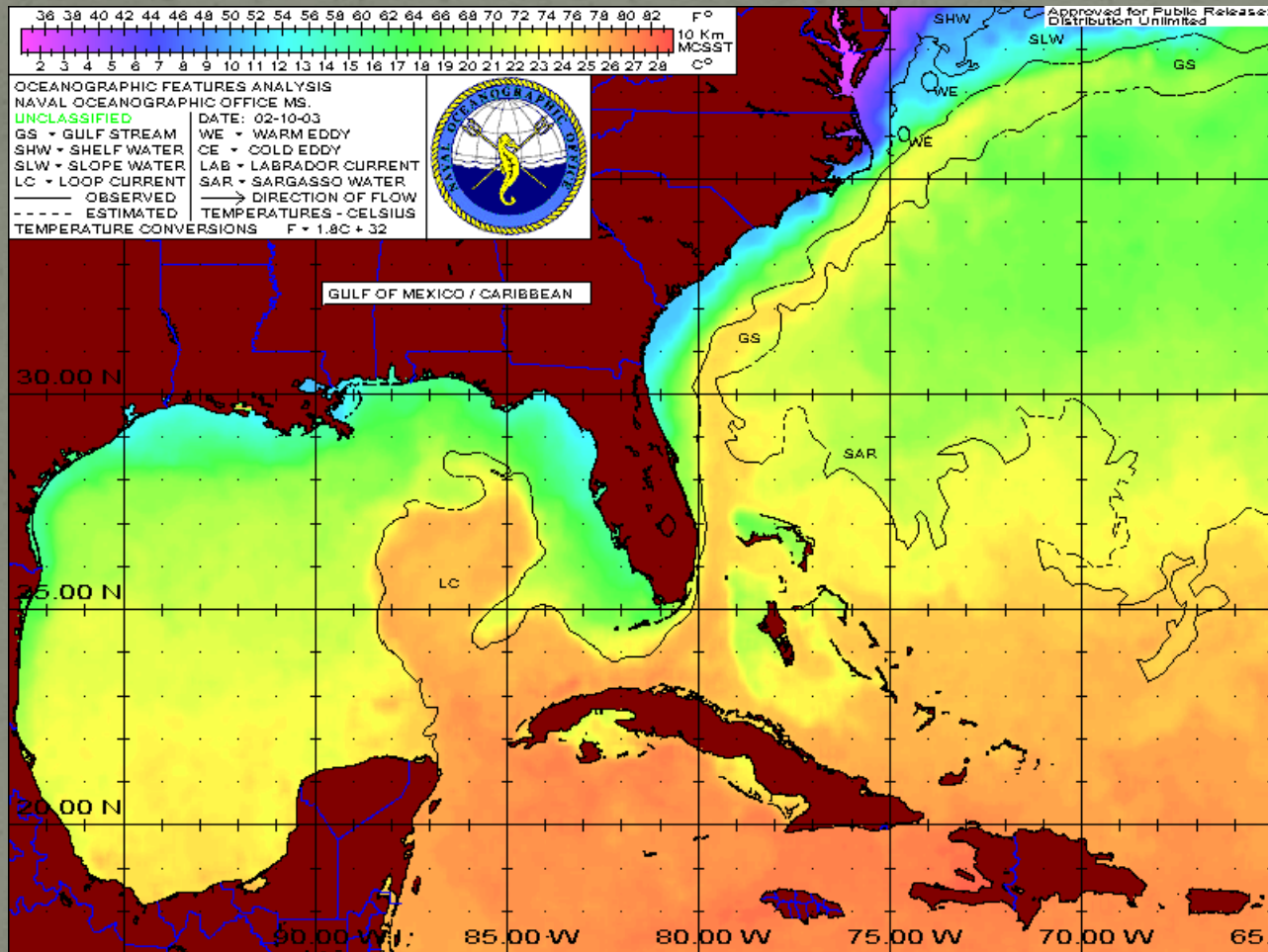
Different parts of the oceans are heated unevenly by the sun.



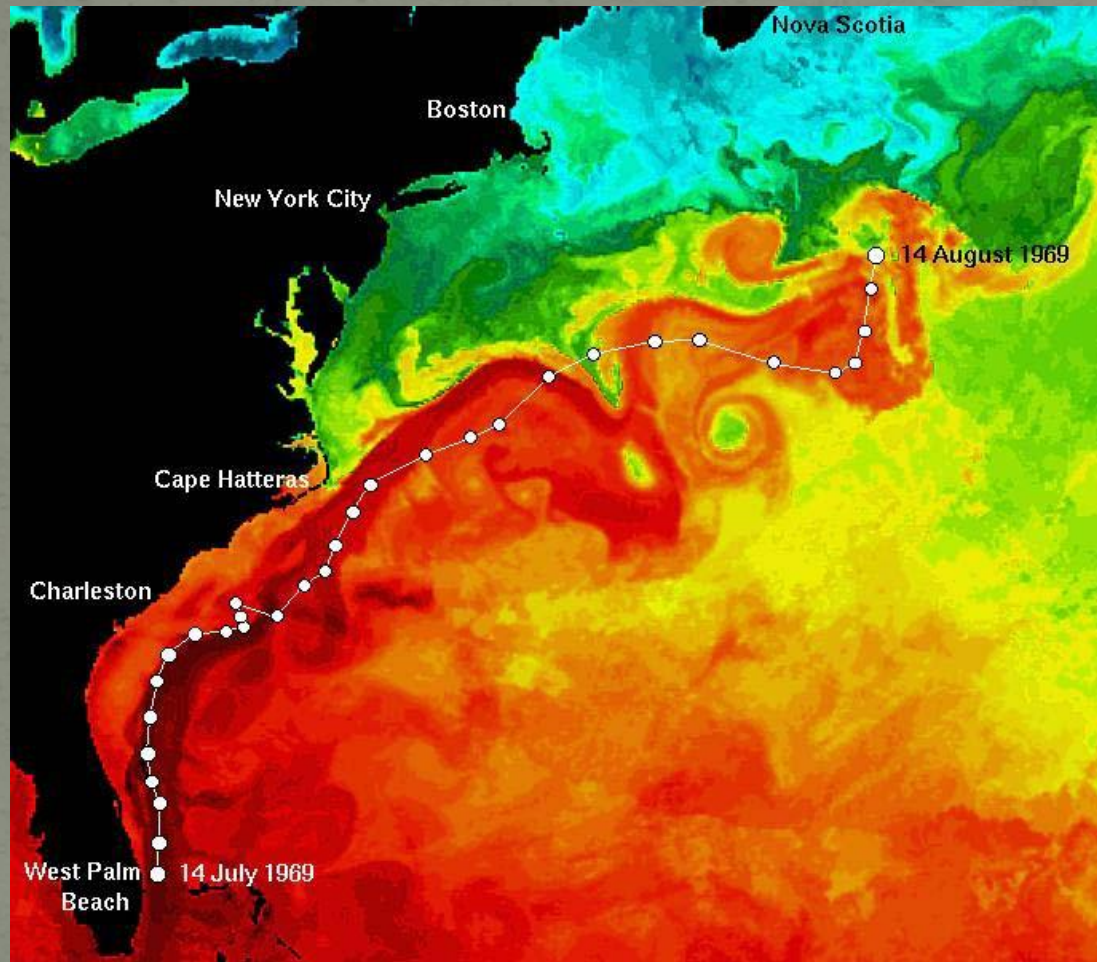
current: a stream of water that flows like a river through the ocean.



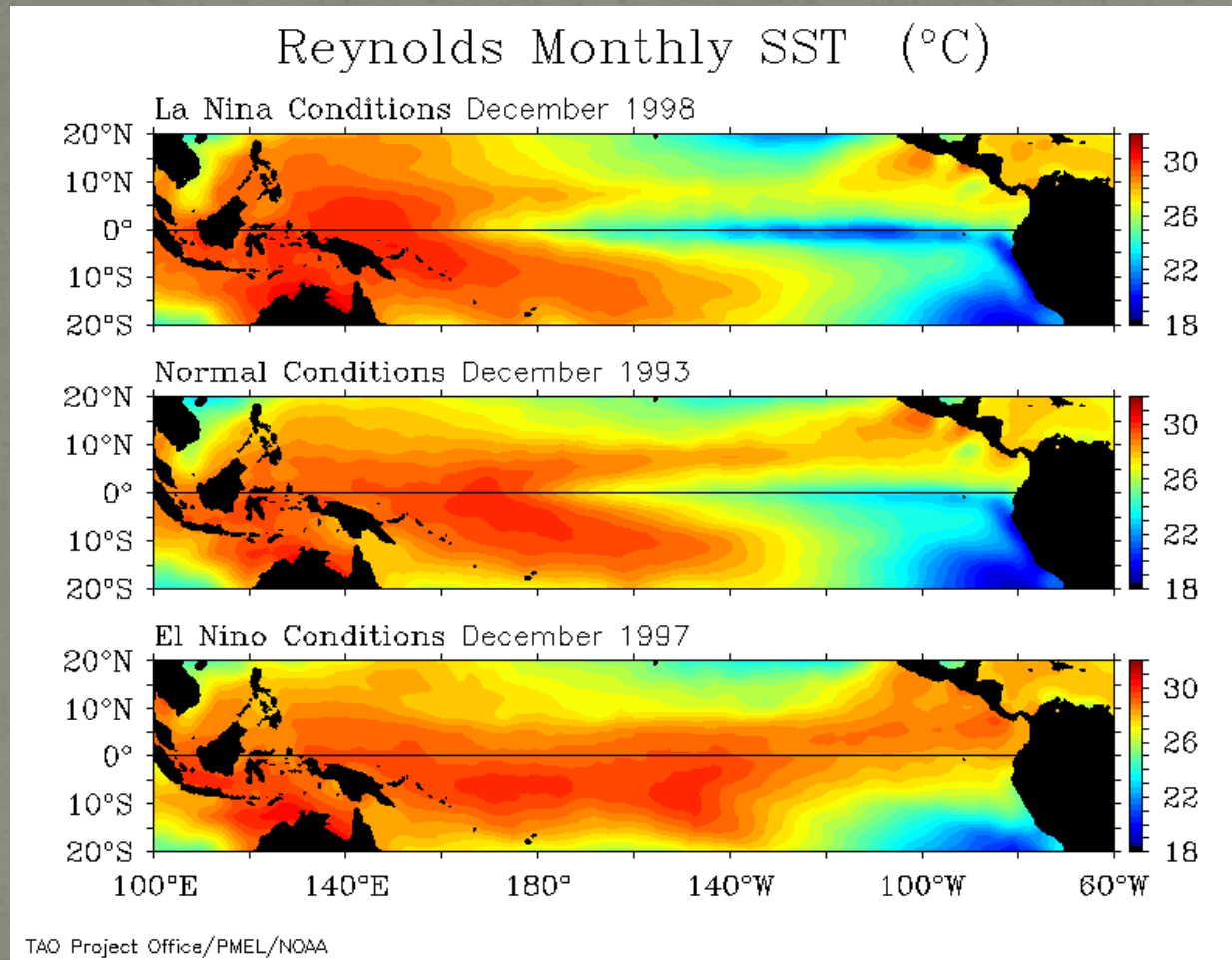
# The Gulf Stream current flows across the Atlantic Ocean.



# The Gulf Stream



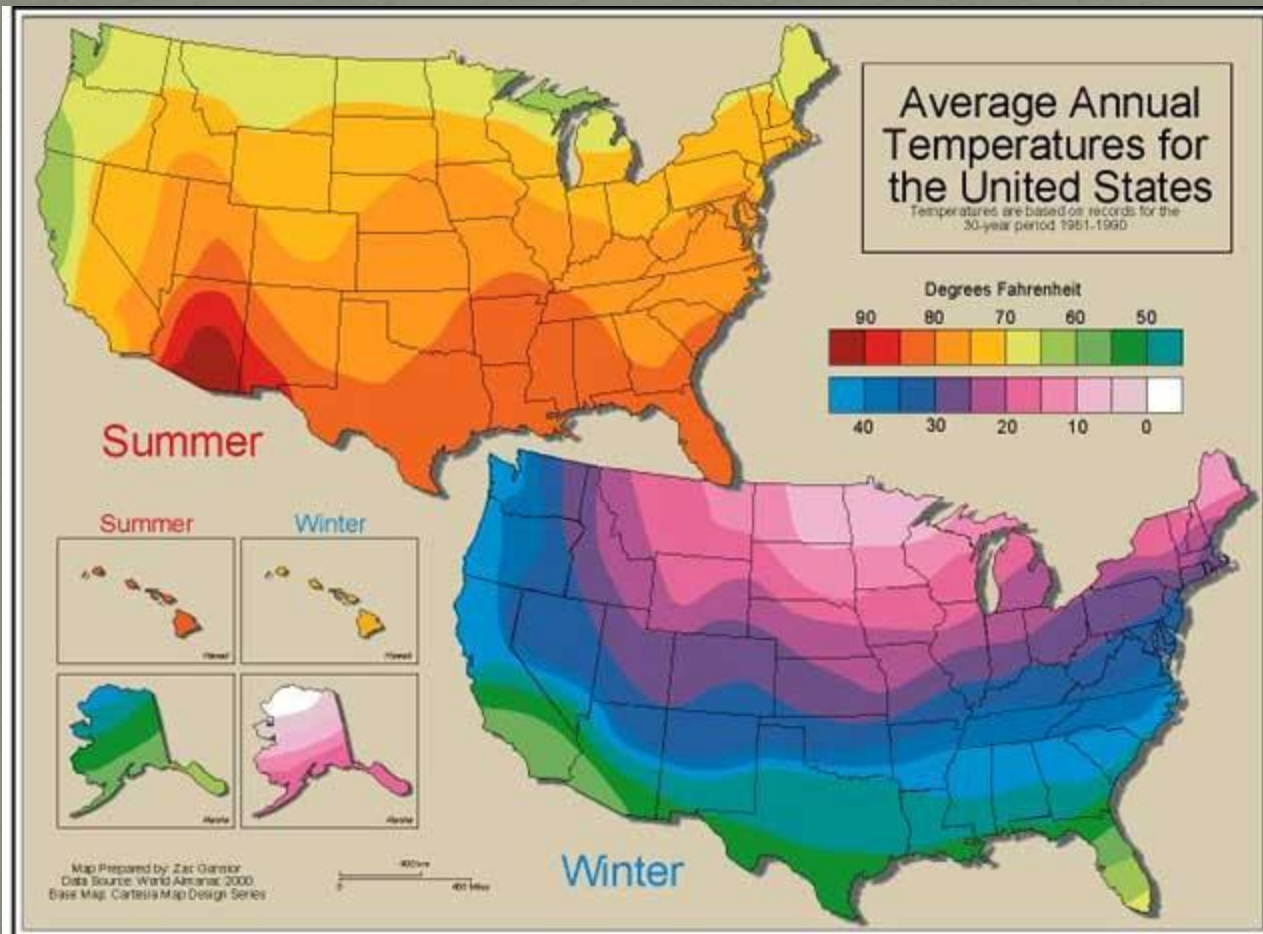
Coastal waters stay warm if the winds don't blow it away from the coast.



El Nino causes wetter than normal weather in North America.

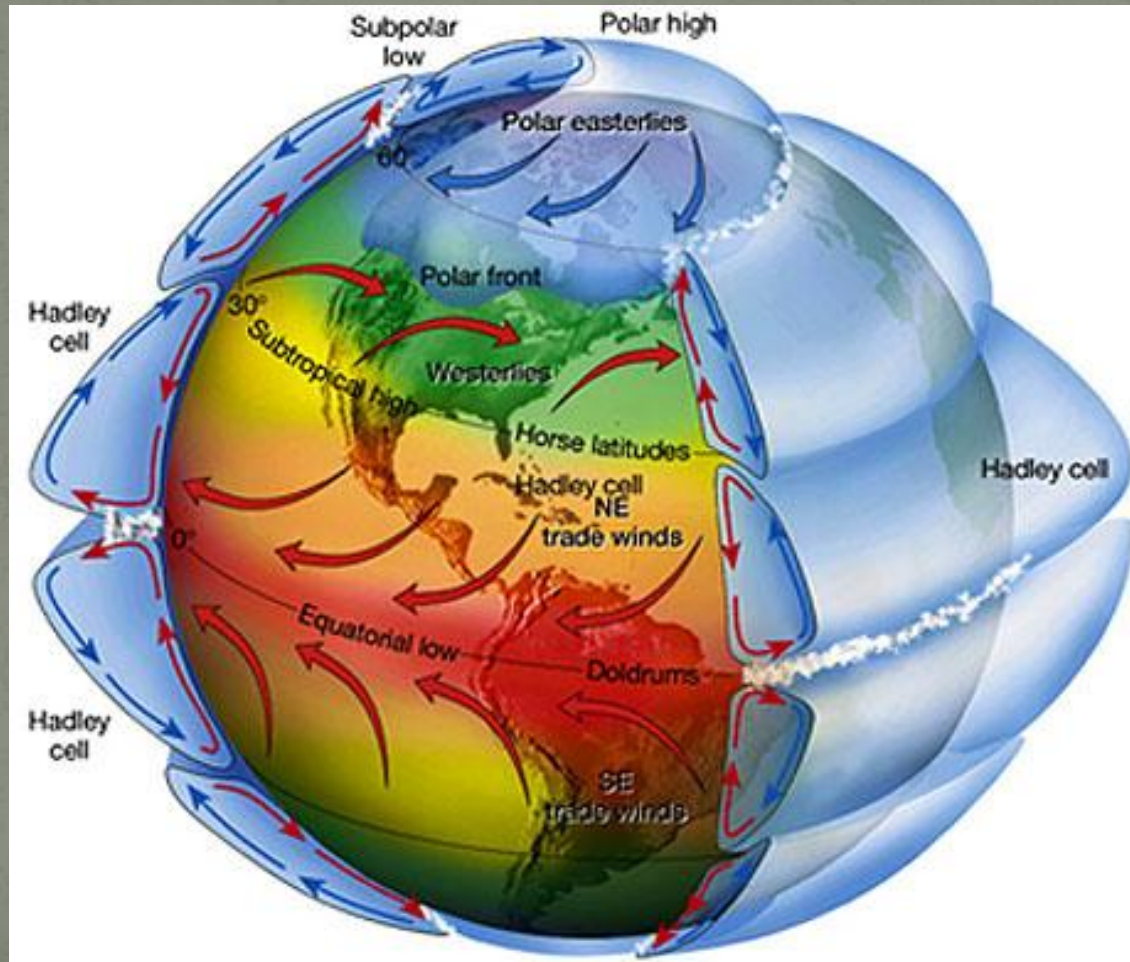


As water gains heat energy it evaporates and enters the air.

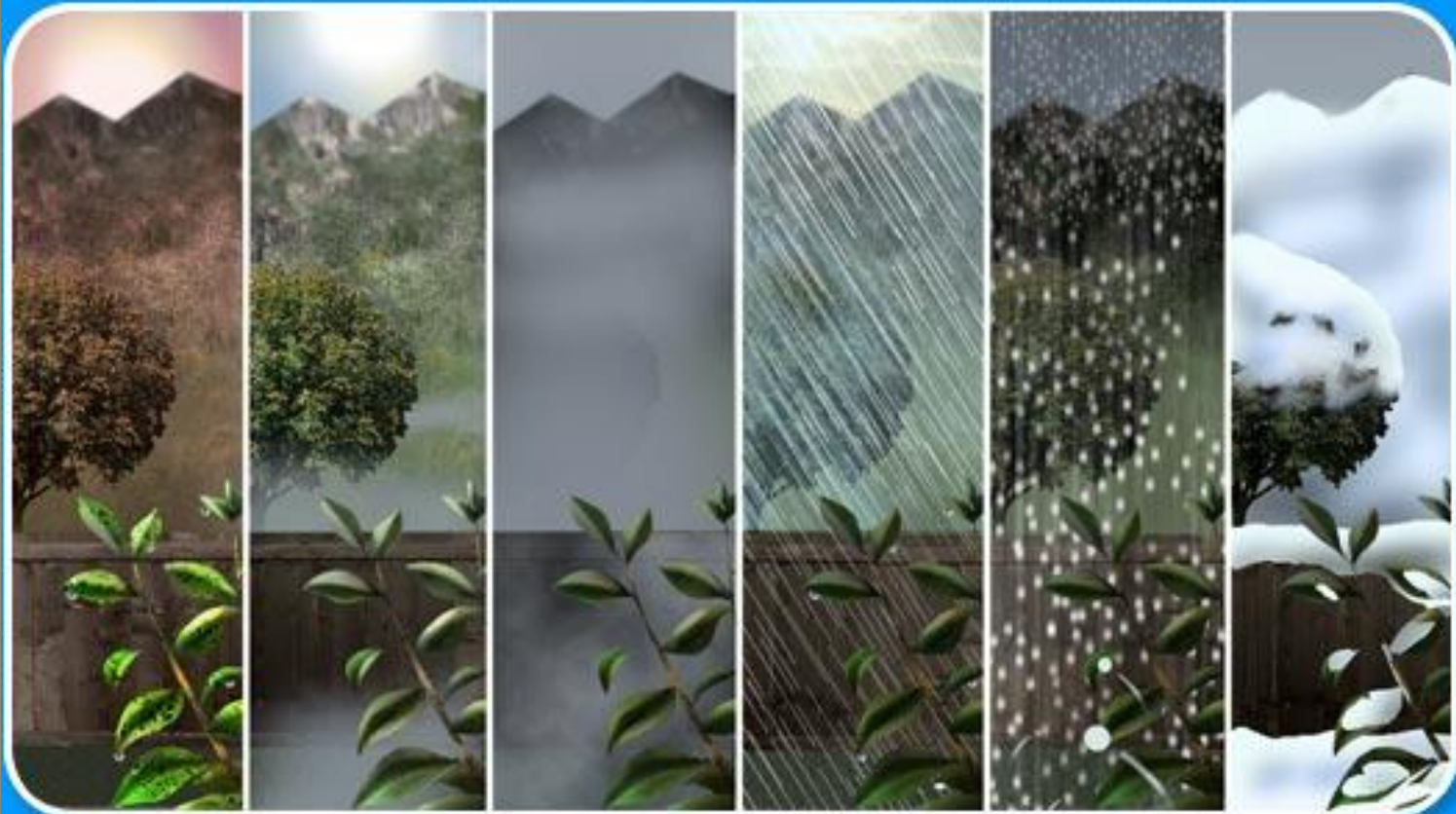




The sun also heats the atmosphere unevenly causing winds to form that blow water vapor to cooler areas.



As water vapor loses heat energy it condenses to form liquid again.



Dew

Mist

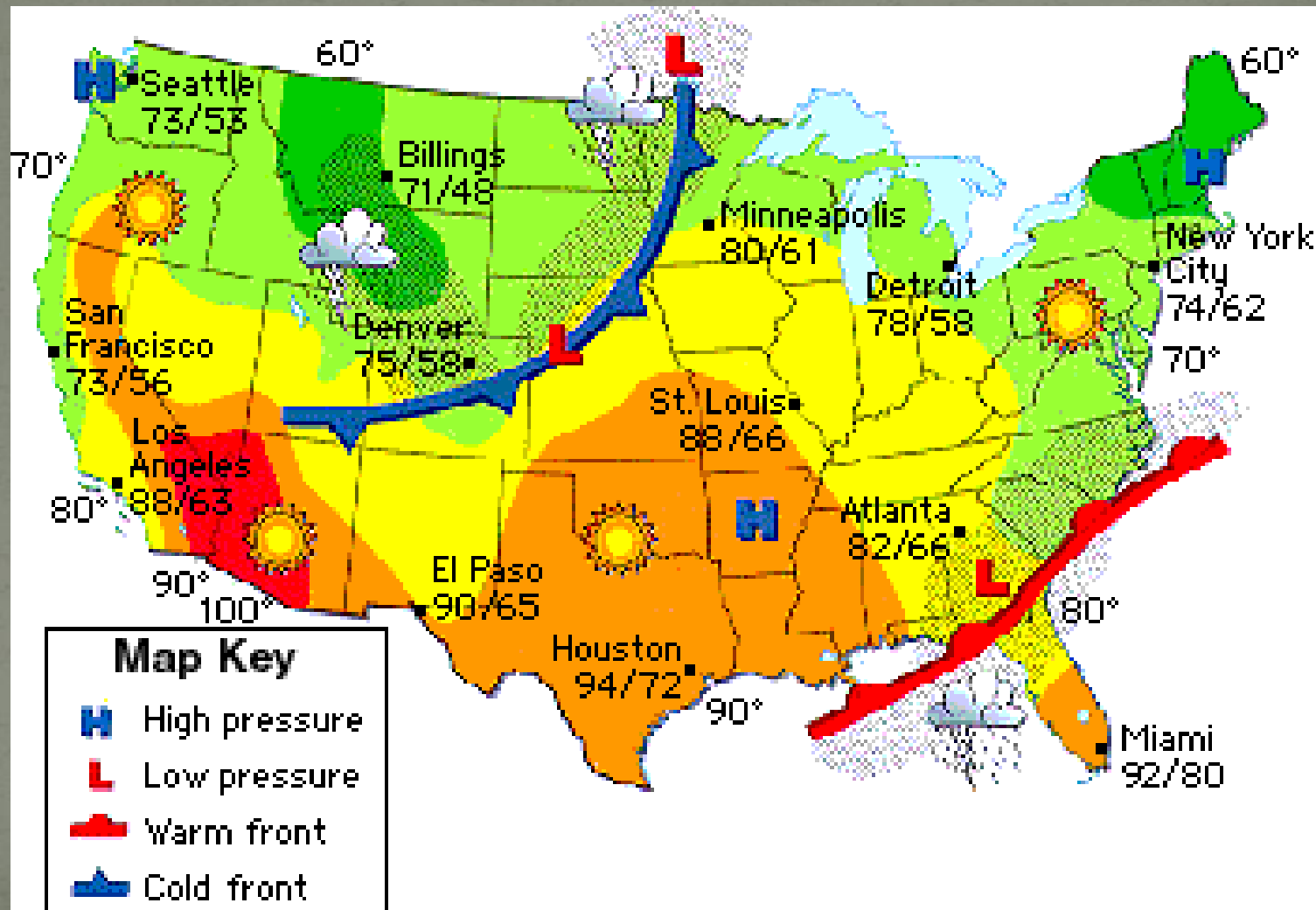
Fog

Rain

Hail

Snow

weather: the condition of the atmosphere at a particular time and place.



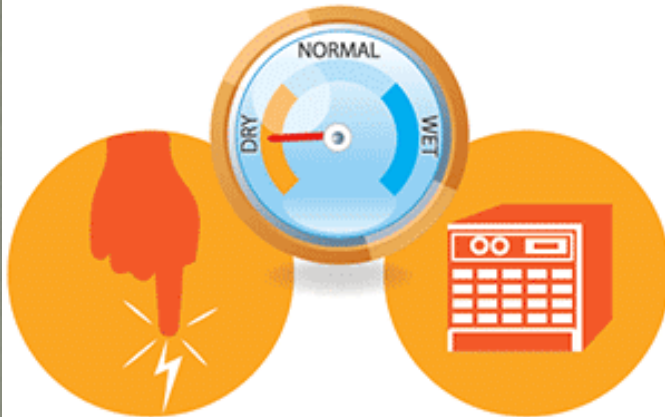
humidity: the amount of water vapor in the air.

## TOO DRY

LESS THAN

**15%**

HUMIDITY



You may notice you're getting zapped by door-knobs and light switches.

A humidifier will help increase humidity.

## TOO HUMID

GREATER THAN

**50%**

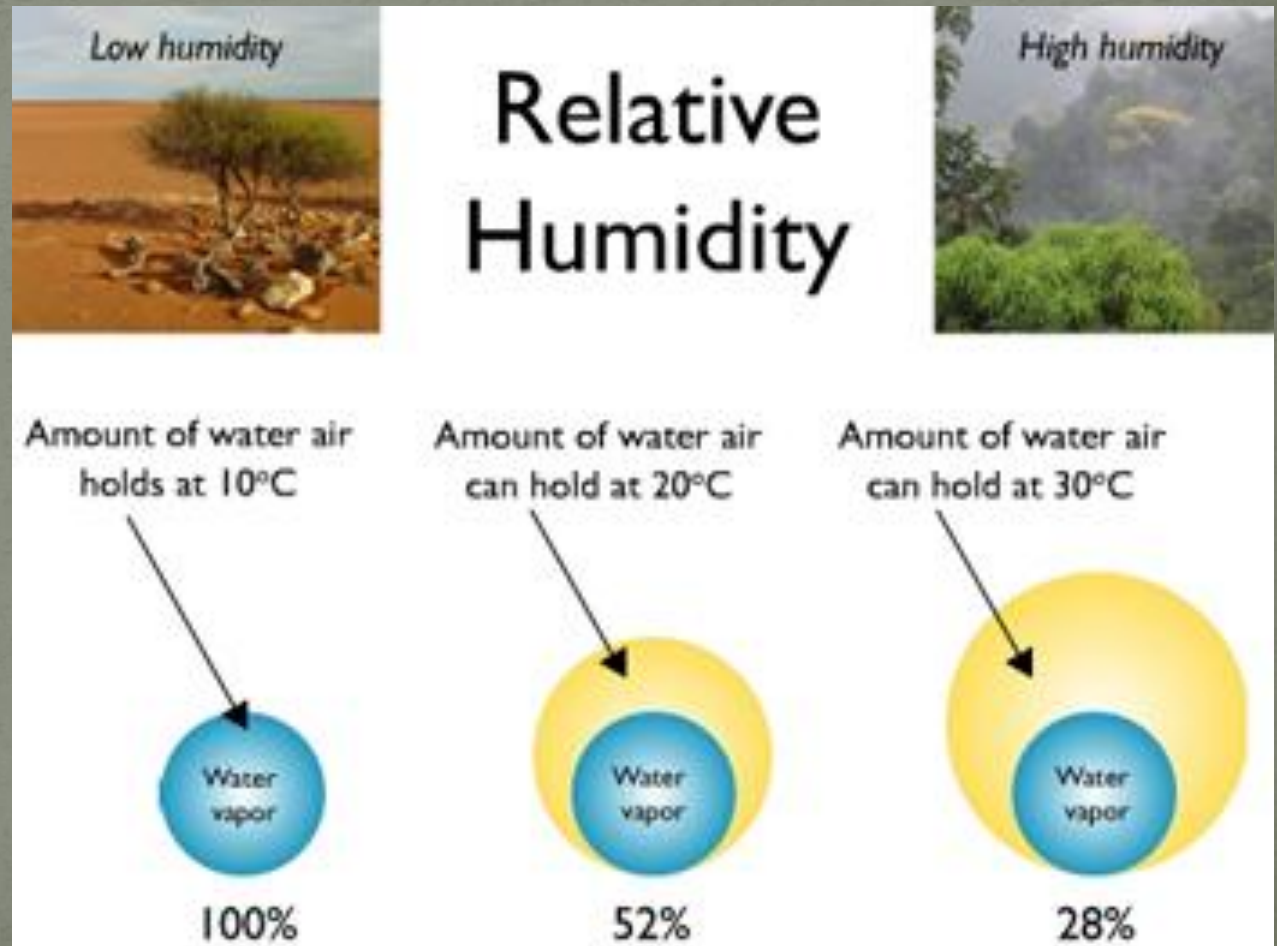
HUMIDITY



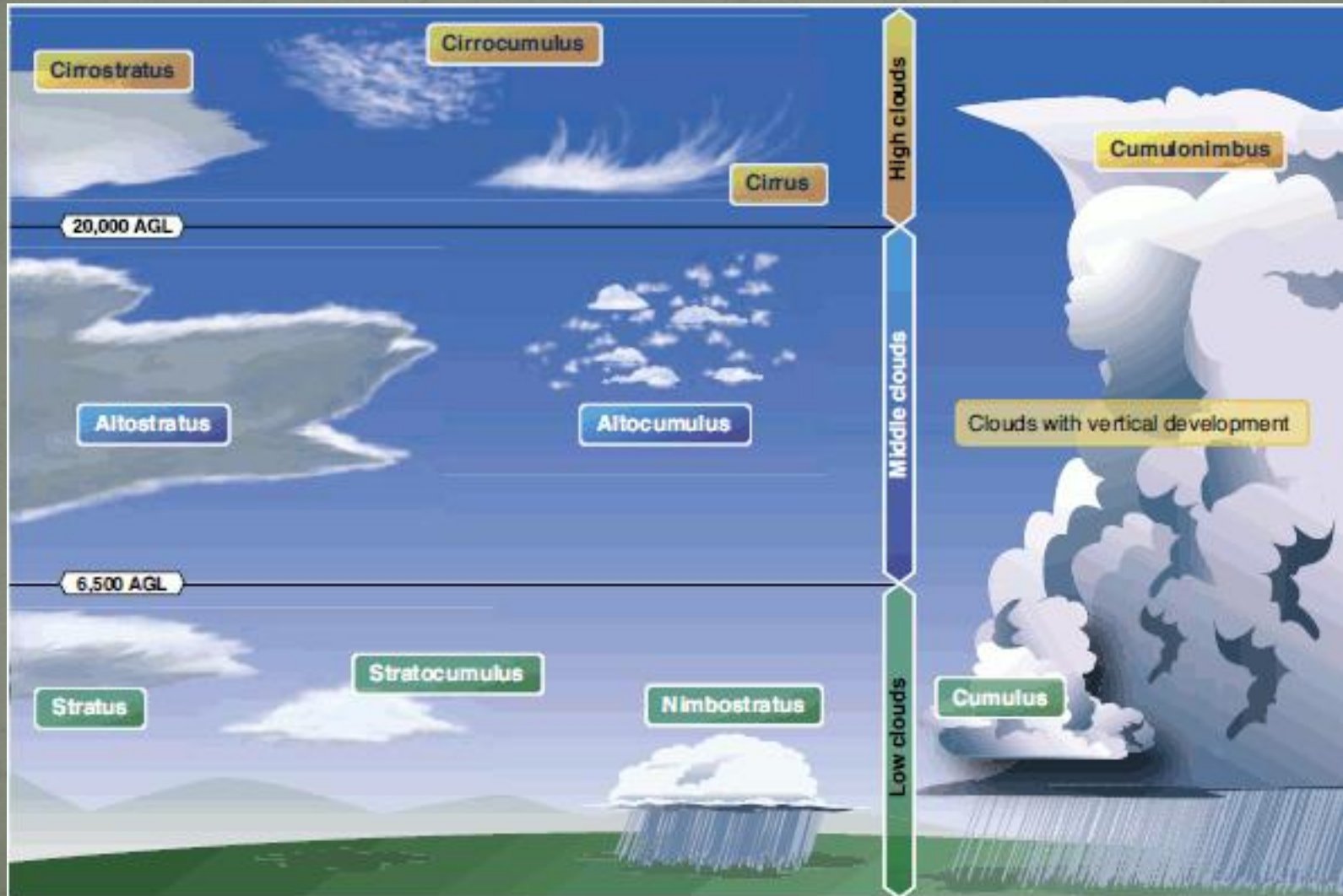
You may notice that your hair is frizzier than usual.

Air conditioning will help lower humidity.

Humidity depends partly on the air's temperature. Warm air can hold more water vapor.



Different types of clouds form at different heights in the atmosphere.



Why do you think hailstones have layers?

