

# Observations

## Cloud

- wisps
- contrails = condensation
- \* trails left from airplane

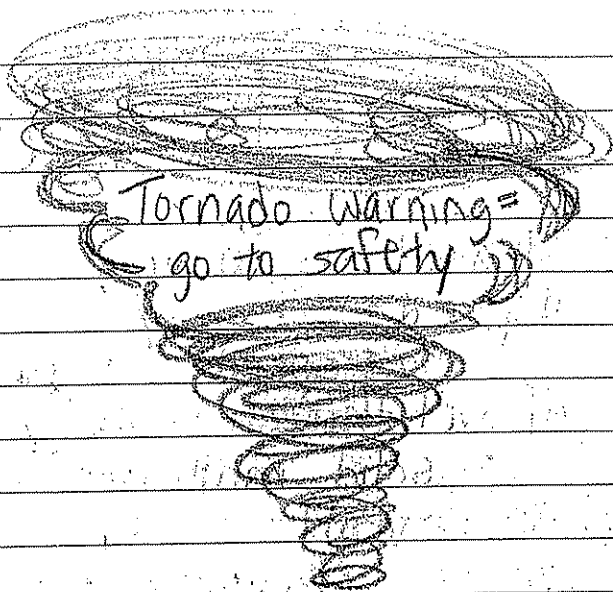
## Temperature

- cold
- chilly
- ~~-----~~

## Sun

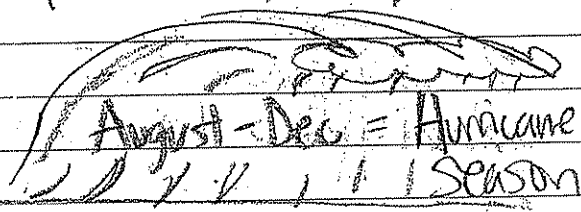
## Wind

- lots - Coriolis effect - high to low pressure system
- low pressure system in Topeka - high pressure system in MO
- \* high pressure day = nice low pressure = stormy



## Humidity

- sticky - wet

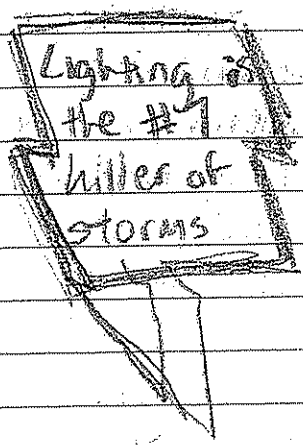


## Precipitation

- fog, rain, sleet, snow, hail

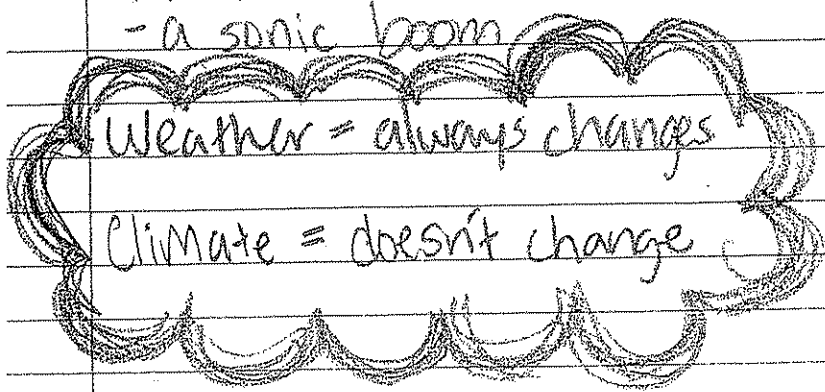
## Lighting

- can happen during snow



## Thunder

- a sonic boom



# Weather Notes

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Who is the National Weather Service?

- They issue weather forecasts
- They send up a weather balloon to gather data.

## Meteorologist

- A meteorologist is someone whose job it is to predict the weather.
- Different kinds of meteorologist
  - Some are on TV
  - Some research in a lab or find new ways to predict the weather.

## Weather Terms

Weather is the condition of the earth's atmosphere over a brief period of time, like a day or a week. It is described with terms like hot, cold, windy, wet, and dry.

Temperature is a measurement of how hot or cold the air is.

Humidity describes the amount of water that is in the air. No water in the air = Arid

Water = Humid      No water = Arid

Precipitation is water that falls to the ground from the sky

Wind is air that is moving across the surface of the earth.

## Cloud Types

- Cirrus - thin, wispy like strands & made of ice crystals
- Stratus - do not usually bring heavy rain. They produce light rain, drizzles, and snow. Means layer or blanket in Latin & flat and dark grey to nearly white
- Cumulus - means heap or pile of puffy or cotton-like

# Weather Part 2

Pg 3

- Cumulonimbus - tall, dense, and involved in thunderstorms and other intense weather & form from cumulus clouds and can further develop to a supercell.

## Storm Form

Warm moist comes up  $\Rightarrow$  cold air comes down

## -Tornado

Can produce 300+ miles per hour (winds)

## -Lightning

- 50,000° F • Can strike 10 miles away

## -Hail

• Starts as rain

• Layered rain

## -Flash Flood \*even more deadly than lightning

- 6 inches can sweep away a grown adult

## Water Cycle

Evaporation

Transpiration

Condensation

Precipitation

## -Hurricanes

- tropical cyclone
- 75 mph or greater
- size of Texas

Stationary - Red/Blue

Alternate

Cold Front - Blue-Cold

Triangles - kinkles

(point in the direction of movement)

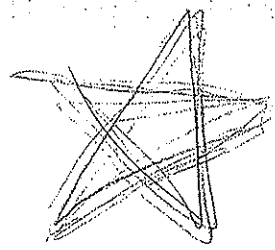
Warm Front - Red-Warm

1/2 sun - Sun

(point in the direction of movement)

Red = 1/2 suns

Blue = triangle



# Observations

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Part 2

Lots of clouds

- Dark, thick, moving fast
- The more water in the cloud the less sunlight can be shined through

## Weather Part 3

Low Pressure System



- It moves counterclockwise & inwards
- Warm air rises & cold air lowers
- Cold Front meets Warm Front. turns into thunderstorms. Cold Front + Warm Front = storm
- Front edge of a warm front = showers

High Pressure System

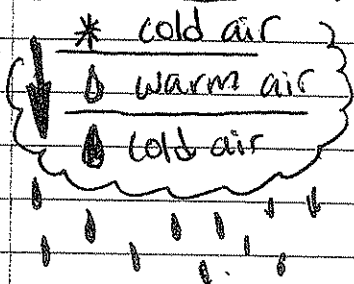


- High pressure = nice weather

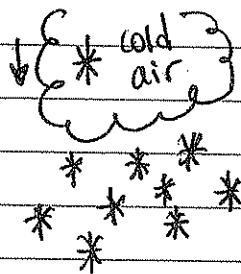
Warm Air & Cold Air are constantly mixing!

- equator air moves one way while pole air moves the air

Sleet-frozen rain



snow



Climate Regions

- Polar - both poles (freezing)
- Temperate - four seasons (KS)
- Arid - desert (dry)
- Tropical - right next to the equator
- Mediterranean - (A & Italy same zone)
- Mountains - (Highlands) where high or tall mountains