

# Weather Observation

- ① Wind - all things move hot to cold
- Warm Front moves toward the Cold Front  
(+ tornadoes happen where they meet)
  - ★ Thunder storm happen

- Beach Wind
  - Sun heats the sand faster than the water
  - Daytime - hot sand pushes wind toward the water
  - Nighttime - hot water pushes wind toward the sand

- Barometric Pressure
  - pressure moves from high to low  
(Balloon flying around)

nice day = high pressure system

- ② Humidity - water in the air (soggy) (muggy)
- Sun evaporates water (musty) (sticky)
- Condensation after cooling

- frizzy hair

$66^{\circ}$  = temp       $61^{\circ}$  = Dew Pt.

85% Humidity

it will rain @  $61^{\circ}$

- ③ Temperature Sun causes heat
- Summer = Sun is high (more direct)      Winter = Sun is low

- ④ Clouds block sunlight today - grey, some blue  
Sky, low clouds

## ⑤ Precipitation

- rain - hail - snow - freezing rain - sleet
- fog (green sky) - sprinkle - mist - shower
- drizzle

## ⑥ Lightning #2 killer

positive ; negative charge

Spark = discharge

- cloud to cloud = positive ; negative particles
- cloud to ground = top and bottom and bottom to top
- Do not - under tree - outside - umbrella
- javelin - swim - wet sand - by a window
- sit in front of TV's - next to outlet
- take a shower
- Lightning Rod - metal pole on top with a wire going to the ground

## ⑦ Thunder Sonic Boom, faster than sound every 5 second is 1 mile

## ⑧ Airplanes Contrail - Condensation of water coming out of the engine (ice crystals)

## ⑨ Dark Blue Sky @ Zenith - light blue sky @ horizon

- more water @ horizon

## ⑩ Hurricane - Atlantic Ocean Typhoon - Pacific Ocean

eye = calm

(H) Tornado = Cyclone

- circular motion due updrafts
- wind shear makes it go vertical
- wall cloud - see daylight under it
- funnel cloud - do not touch ground
- tornado - ground contact

EF = Enhanced Fujita 0-5

Do Not hide under an overpass

Watch  $\neq$  Warning  
(chance) (go to shelter)

Basement - under mattress, under a couch, under stairs -

Interior wall no windows - Bathroom walls have pipes

Hide in a ditch or low area

Put on Shoes - Store Shoes in the Shelter

### Tornado Kit

- ① Food for 3 Days
- ② Water - 1 gal/person/day
- ③ First Aid Kit
- ④ Flashlight
- ⑤ Batteries
- ⑥ Weather Radio
- ⑦ Shoes
- ⑧ Whistle
- ⑨ Infant Supplies
- ⑩ Wipes
- ⑪ plastic bag
- ⑫ dust mask or t-shirt
- ⑬ tarp
- ⑭ duct tape
- ⑮ Tool Kit
- ⑯ can opener
- ⑰ Fire Extinguisher
- ⑱ Pet Supplies
- ⑲ Medicines
- ⑳ pads/tampons
- ㉑ legal documents

⑫ NWS - National Weather Service Pleasant Hill, MO  
Topeka, KS Broadcast Weather Alerts & Forecasts  
launch weather balloons

### ⑬ Meteorologist

Brian Busby Gary Legak Karly Ritter Katie Horner

1) In front of camera

2) Behind the camera - research weather - make predictions

- make graphics - train people to spot tornados

### ⑭ Flash Floods - #1 Killer - unexpected - drown

6 inches if standing, 1 foot in a car.

Don't Drown Turn around (Wash out bridges)