

# Observations

- ① Wind - temp. from hot to cold
  - Warm Front moves toward the Cold Front  
(tornadoes happen where they meet)
  - \* Thunderstorms happen
  - Barometric Pressure
    - Nice day = high pressure
    - high pressure to low pressure
  - Beach Wind
    - Sun heats water slower than rocks.
    - Hot sand pushes wind toward water.
    - After Sun set, warm water pushes wind inland (to beach)
- ② Airplanes - contrails - water vapor condenses to ice (freezing)
- ③ Dark Blue Sky @ Zenith - light blue @ horizon
  - more water on horizon
- ④ Temperature - Sunlight = more direct in Summer (high in sky)  
Clouds block sunlight - After a storm we have clear skies.
- ⑤ Clouds - high wispy clouds = nice weather
- ⑥ Humidity - water in the air (sticky) (muggy)
  - frizzy hair
  - Dew Point - temp when rain can happen  $62^{\circ}$  Now  
D.P.  $57^{\circ}$

## ⑦ Lightning #2 killer in storms

- cloud to cloud = positive & negative particles in the air
- cloud to ground = from top to bottom and bottom to top

= also follows charges in the air

- Do Not be in the water
  - stand by a tree
  - stand in wet sand
  - stand by flagpole
  - stand by metal
  - stand by a window
  - stand by electronics or by outlets
  - play sports
- Lightning Rod - metal pole on the top of a building with leading to the ground.
- In a car - stay if possible

## ⑧ Precipitation

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

## ⑨ Thunder

- sonic boom after a lightning strike faster than the speed of sound
- Between Strike and Boom 5 second = 1 miles

## ⑩ Hurricane

Atlantic Ocean

Typhoon

Pacific Ocean

eye = calm

## ⑪ Tornado = Cyclone

circular motion = updrafts

wind shear makes it go vertical

- funnel cloud = not on ground
- wall cloud - see daylight under it
- Fujita Scale 0-5 EF1 = enhanced
- do not hide under an overpass fujita #1

Watch (chance) ≠ Warning (go to shelter)

interior room - no windows

bathroom - pipes in the walls

hide in a ditch or low area

in a basement - cover with a

couch or mattress

hide under stairs

Wear Shoes

## Be Prepared - Tornado Kit

- ① Food
- ② water
- ③ First aid kit
- ④ Flashlight
- ⑤ battery operated radio
- ⑥ Spare Shoes
- ⑦ 1 gal. water per person per day
- ⑧ 3-days supply of food
- ⑨ Batteries
- ⑩ whistle
- ⑪ Infant formula/food
- ⑫ Baby wipes
- ⑬ Trash bags
- ⑭ Dust Mask or old t-shirt
- ⑮ Plastic sheeting
- ⑯ Duct Tape
- ⑰ Tool Kit
- ⑱ Can Opener
- ⑲ Pet Supplies
- ⑳ Fire Extinguisher

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

## ⑬ Meteorologist

Brian Bushy Gary Lesak Carly Ritters  
Katie Horner

a) in front of camera

b) behind the camera

- researchers weather, make presentations  
to train people to spot tornadoes

## ⑭ Flash Floods #1 Killer

- unexpected
- drown
- 3 inches can move a car
- washed out roads