

# St. Joseph County 4-H Weather and Climate Project Guidelines



## Year 1:

- o *Explore the different weather phenomena*
  - ★ **Weather phenomena** are clouds, rain, hail, tornados, thunderstorms, lightening, wind, hurricane, floods, snow, ice, freezing rain, temperature and seasons.
- o Develop a neat & creative display/report that shows a members basic understanding or of the weather phenomena.

## Years 2-10 Suggested Topics:

- o *Weather Safety*
  - ★ Preparation / kits / escape route (plans)
  - ★ First Aid / CPR training
- o Sky Warn Training (severe weather spotters training)
- o Ham Radio License
- o Learning how to read Doppler Radar and other maps.
- o *Meteorological Field Exploration*
  - ★ Keep a journal of the different meteorological career fields that you explore.
    - National Weather Service, Television & Radio broadcast, Private firms, Aviation, etc.
- o *Map Analysis & forecasting*
  - ★ Learn to read and analyze different maps used in forecasting and evaluating the weather.
    - Screw-T, Upper Level Maps and Surface Maps
- o *In-depth reports on selected topics:*
  - ★ Tropical Meteorology
  - ★ Aviation Meteorology
  - ★ Snow: "Lake-Effect"
  - ★ Snow: "Mountain"
  - ★ Thunder & Lightening
  - ★ Tornadoes
  - ★ Micro/Macroburst
  - ★ Wind (Circulation)
  - ★ Hurricanes
- o Climates
- o Comparative Climates
- o Climate Change