

# Weather Watchers

Hiller Aviation Museum  
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1. Weather and Aviation
  - a. VFR Flight: Pilots must see and avoid other aircraft and terrain
  - b. IFR Flight: Potential for hazards such as icing and wind shear
  - c. Contributes to 70% of commercial flight delays
  - d. Contributes to 30% of commercial flight accidents
2. Air Pressure Demonstrations
  - a. Can Crusher
  - b. Square Inch/Square Foot
  - c. Bernoulli/Coanda Leaf Blower
3. Water Cycle Bracelet
  - a. The Sun (yellow bead)
  - b. Evaporation (clear bead)
  - c. Condensation (white bead)
  - d. Precipitation (translucent blue bead)
  - e. Accumulation (dark blue bead)
4. Cloud Identification/Cloud Cards
  - a. Low Clouds: Stratus
  - b. Middle Clouds: Alto
  - c. High Clouds: Cirrus
  - d. Growing (Vertically Developed) Clouds: Cumulus
  - e. Thunderstorm Cloud: Cumulonimbus
5. Thunderstorms and Aviation Weather Hazards
  - a. Cumulus Cloud Formation
  - b. Turbulence
  - c. Lightning (Demo)
  - d. Tornadoes (Tornado Tubes)
6. Resources
  - a. Water Cycle Bracelets
    - i. Pony Beads: Pony Beads & More <http://www.ponybeadstore.com/> (all colors, less than \$2.50 per 500)
    - ii. Pipecleaners: Dick Blick <http://www.dickblick.com/> (all colors, \$1.15 per 100)
  - b. Lightning Generator (Plasma Ball): Steve Spangler Science <http://www.stevespanglerscience.com/>, \$15.99
  - c. Tornado Tubes: Steve Spangler Science <http://www.stevespanglerscience.com/>, \$34.99 per 100
  - d. Weather Windows: Nature Watch, <http://www.nature-watch.com/> (\$34.75 per 25)