

# Notes for Clouds and Precipitation

- Clouds - form when warm, moist air rises and cools down to the dew point causing water vapor to condense into water droplets.
  - Form best on warm, sunny days.
  - Contrails – water vapor in exhaust from planes condenses
- Precipitation – when water droplets in clouds become too heavy and fall towards the ground
  - Rain – temperatures above freezing entire way
  - Freezing rain – temperature is above freezing up high but below freezing near the ground
  - Sleet - When there is a layer of warm air between two layers of air below freezing. (ice – melts – wet ice)
  - Snow – When the temperature is below freezing entire way

- **Lake Effect Snow** – when lake water evaporates into air that then moves over land where the water condensates into snow
- **Hail** – form when there are strong convection currents in the clouds. Common in warmer months and is associated with thunderstorms and tornadoes.