

THINKING CRITICALLY

● Water, Water, In the Air

1. Hillary's family moved to Florida in August, into a house without air conditioning. Even though they keep all the windows open while they're home, they've been miserably hot.
 - a. Why would a fan make them feel cooler?
 - b. Why would a dehumidifier also be helpful?
 - c. It's Saturday morning, and Hillary's whole family is ready to leave for the beach. Hillary's father insists that leaving all of the fans on will make the house feel cooler when they return (all of the windows are closed to deter theft). But Hillary tells her father it would be a waste of energy. Why is Hillary right?
2. The fog in London, England, is sometimes said to be as thick as pea soup.
 - a. What causes fog to be so thick?
 - b. London fog does not disappear or "burn off" easily. The evaporation-condensation cycle is being interrupted. What exactly is happening to cause the London fog to persist?
3. Weather forecasts often speak about mixed precipitation. Examine each of the following types of mixed precipitation. Determine if the forms of precipitation can exist together and what conditions are necessary to produce the mixture.
 - a. sleet and hail.
 - b. sleet and freezing rain.
 - c. snow and sleet.