

## ***STUDY GUIDE CHAPTER 16***

1. Know the 4 types of clouds: nimbus, stratus, cumulus, and cirrus.
2. Know the 3 cloud prefixes: cirro-, alto-, and strato-.
3. Draw all the types of clouds. Refer to the “Label the Clouds” worksheet.
4. Draw and explain the 4 types of fronts: cold, warm, stationary, and occluded. For the pictures, draw the air masses and show how the warm air always rises to form clouds. For each front, know if clouds form in a wide band or in a narrow band. Know the symbols for the fronts. Know the types of clouds that appear with each front. Know if the fronts move slowly or quickly. Know if the precipitation is intense or not intense.
5. Know the 6 major air masses in the US. Refer to page 462.
6. Know the direction of wind around high’s [up, in, and clockwise] and low’s [down, out, and counter-clockwise].
7. Do weather systems move east or west in the US? Why? (HINT: Go back to chapter 15)
8. VOCAB: isobar, isotherm, front, air mass, rain, sleet, snow, hail
9. Know how to read a basic station model. Remember how to convert the air pressure numbers.
10. Understand how to draw and interpret station model information. Refer to the “Station Model” worksheets.
11. Know how to interpret a weather map. Refer to these worksheets:
  - “Weather Map - New York Times”
  - “Weather Map - Bergen Record”
  - “The Weather Cyclor”
  - “Reading Weather Maps”
  - “Fronts”
  - “Humidity”

Know how to answer ALL of the questions on ALL of the dittos! ☺

12. **ESSAY QUESTION: HOW DO CLOUDS FORM?**  
In your answer, fully discuss: humidity, saturated, dew point, and condensation. Also discuss the ability of warm and cold air to hold water molecules. Be able to draw the circle/dot diagrams for warm air and cold air.