Lesson 6: How Do Storms Form?

BBB: Weather Forecast

Watch the video located at any one of the following addresses:

http://goo.gl/zemCEC

http://www.youtube.com/watch?v=7wPnAUxHLD8

After carefully watching the video, answer the following questions:

- 1. (Multiple-choice) What type of front is moving into Arlington Heights according to Mr. Bingaman?
 - a. Warm air from Canada
 - b. Warm air from the Gulf of Mexico
 - c. Cold air from Canada
 - d. Cold air from the Gulf of Mexico
- 2. (Fill in the blank) _______ is the transfer of thermal energy from the ground to the air.

is the cycling of air from updrafts, upper winds, downdrafts, and lower winds.

3. (Circle the correct word): When air is heated the air becomes (more / less) dense. When air is cooled the air becomes (more / less) dense.

4. When an air mass is colder than the surrounding air it causes a(n),

- a. Updraft
- b. Downdraft
- c. Surface wind
- d. Upper wind

5. When an air mass is warmer than the surrounding air it causes a(n): _____.

- a. Updraft
- b. Downdraft
- c. Surface wind
- d. Upper wind
- 6. When warm, moist air rises, it loses pressure. What happens to this air?
 - a. It becomes sunny.
 - b. It becomes windy.
 - c. It becomes cloudy.
 - d. It becomes warmer.



Your Progress:

- Masterv
- Proficient
- Developing
- Beginning

- 7. What is the transition zone or boundary between two different air masses called?
 - a. a front
 - b. a low pressure system
 - c. an isobar
 - d. a cumulonimbus cloud
- 8. What type of storm is associated with a <u>cold</u> front? (Select all that apply.)
 - a. Strong updrafts.
 - b. Lightning and thunder.
 - c. Gentle updraft.
 - d. Gentle rain.
- 9. When viewed from the side, fronts are slanted. Why?
 - a. Because surface winds are faster than upper winds.
 - b. Because Isobar lines are never straight.
 - c. Because warm air slides underneath cold air.
 - d. Because warm air floats on top of cold air.

10. Does Mr. Frintner need to cancel his track meet?

- a. Yes, because a very powerful storm is coming.
- b. No. There is no storm coming, it will not hit Arlington Heights.
- c. Yes. The storm has blown the other team's bus into a ditch.
- d. No, because the storm will be very short, and will end before the meet.

Use the words in the word bank to fill in each shape in the blank storm model:

