

VARIATIONS FOR THE AIR MASSES LESSON

STUDENT QUESTIONS SHEET

You should have two maps of Oklahoma. One with temperatures the other with dew point temperatures.

*** Remember - dewpoint is an indication of the amount of moisture in the air ***

Have the students **circle** the numbers on each map according to the following key:

For Temperature Map

- If First Digit is a 2 or 3 (i.e., 20, 33 etc.) circle the number using a BLUE crayon
- If First Digit is a 4 circle the number using a GREEN crayon
- If First Digit is a 5 circle the number using a YELLOW crayon
- If First Digit is a 6 circle the number using a RED crayon

For Dewpoint Map

- If First Digit is a 2 circle the number using a DARK BLUE crayon
- If First Digit is a 3 circle the number using a LIGHT BLUE crayon
- If First Digit is a 4 circle the number using a GREEN crayon
- If First Digit is a 5 circle the number using a YELLOW crayon
- If First Digit is a 6 circle the number using a RED crayon

Now shade the areas according to the color of the circled number. Example color the areas with the blue circled numbers BLUE. Continue until the map is completely colored. Repeat this process for the Dewpoint map.

Analysis: Using the maps you prepared, answer the following questions.

1. Looking at the warmest temperatures region A, are the dew points high or low in this region?
2. Looking at the coolest temperatures region B, are the dew points high or low in this region?

3. If you were to describe the regions as (1) warm and dry, or (2) warm and moist, or (3) cool and dry, or (4) cool and moist, how would you describe Region A?
Region B?

4. The Northern Hemisphere can be divided into three “latitudinal” regions:
- (a) the polar regions, between 0 degrees north and 30 degrees north
 - (b) the middle latitudes, between 30 degrees north and 60 degrees north
 - (c) the tropics, between 60 degrees north and 90 degrees north.

Using this information, where do you think the air in Region A came from? Why?

Using this information, where do you think the air in Region B came from? Why?

5. Explain the causes of air to be moist or dry.