2007 New York State Science Olympiad – Basic Weather Station 1

- 1-1 Atmospheric pressure can be measured in _____ and _____ (Name, do not abbreviate, 2 different units of atmospheric pressure.)
- 1-2 Atmospheric pressure ______ with height in the atmosphere.
 - A. increases
 - B. decreases
 - C. remains the same
 - D. can increase or decrease depending on the weather conditions

Answer the following questions directly on the surface weather map in Figure 1A on your answer sheet.

- 1-3 Label the positions of the high and low pressure center(s), using the correct symbols to the <u>east of the Great Lakes</u>.
- 1-4 Draw several "solid" arrows (\rightarrow) to indicate the direction of the wind flow around each of the high pressure center(s).
- 1-5 Draw several "solid" arrows (\rightarrow) to indicate the direction of the wind flow around each of the low pressure center(s).
- 1-6 <u>CIRCLE</u> two (2) areas anywhere on the map that are experiencing relatively high wind speeds compared to other areas on the map.

Refer to Figure 1A in your answer sheet for the following questions.

- 1-7 The contour lines on this surface weather map are called ______.
- 1-8 What is the highest possible atmospheric pressure shown on this map to the nearest tenth?
- 1-9 Is it likely that precipitation is falling in the area within the 1036 contour line?
- 1-10 Is it likely that precipitation is falling in the area within the 1006 contour line?
- 1-11 Is it likely that precipitation is falling everywhere along the 1020 contour line?
- 1-12 What time is it in New York State? Hint Daylight Saving Time started on March 11, 2007.

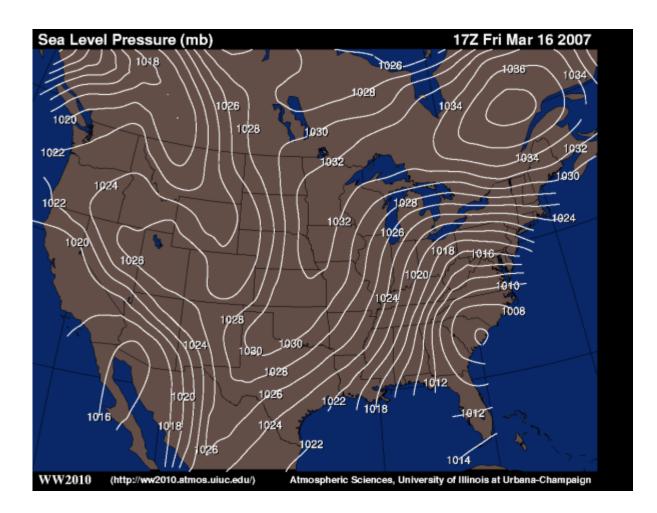


Figure 1A

Do not write on this page. Use Figure 1A on page 4 of your answer sheet.