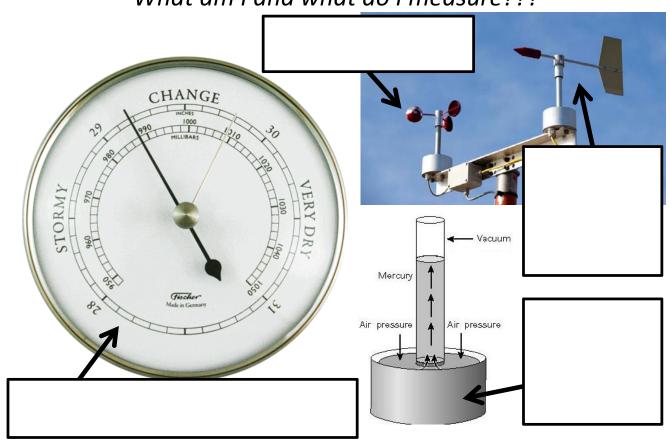
#### **Air Pressure and Wind**

NAME: \_\_\_\_\_

#### **Weather Instruments**

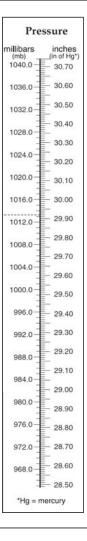
What am I and what do I measure???



# **Pressure Conversion**

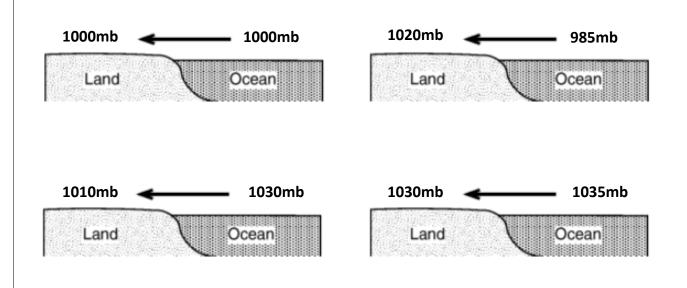
#### **Covert the following:**

- 1.) 1010mb = \_\_\_\_\_in of Hg
- 2.) 29.23in = \_\_\_\_ mb
- 3.) 1028.5mb = \_\_\_\_\_ in of Hg
- 4.) 29.60in = \_\_\_\_ mb

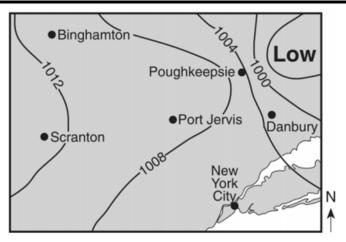


#### **Wind and Pressure Differences**

Which diagram correctly shows the air pressure differences that would cause the wind to blow the fastest from the ocean to the land?



## **Air Pressure and Wind Direction**

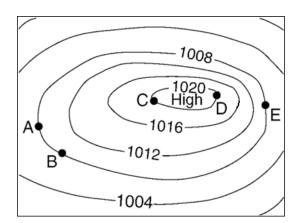


Surface winds are most likely blowing from

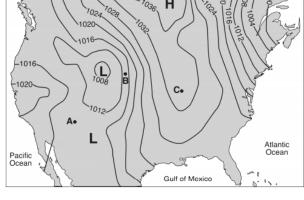
- A. Danbury toward New York City
- B. Poughkeepsie toward Scranton
- C. Binghamton toward Danbury
- D. Port Jervis toward Binghamton

- 1. Draw an arrow connecting the 2 cities you chose to the left showing the wind direction.
- 2. Name the wind based upon the arrow direction.

## **Wind Speed**



Between which two locations is the wind speed greatest?



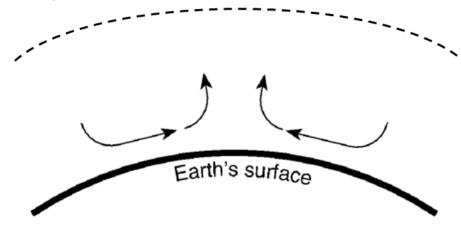
Which location was probably experiencing the highest wind speed?

- A. A and B
- B. B and C
- A. A
- B. B
- C. C
  - D. D

- C. *C* and *D*
- D. D and E

## **Energy Transfer in the Atmosphere**

- 1. Different temperatures in Earth's atmosphere cause the air to move, which we know as wind. What type of energy transfer is this?
- Based on the direction of the arrows below, label areas at the Earth's surface where it is relatively cold and where it is relatively warm.



### **High and Low Pressure Systems**

Draw 4 arrows around the high and 4 around the low to show the movement of air (wind) around each pressure center.



#### **Jet Stream**

- 1. Place an "X" on NYS.
- 2. Draw an arrow across North America to represent the direction of the Polar Jet Stream.
- 3. According to where you drew the jet stream, label where the air is relatively warm and where it is relatively cool.

