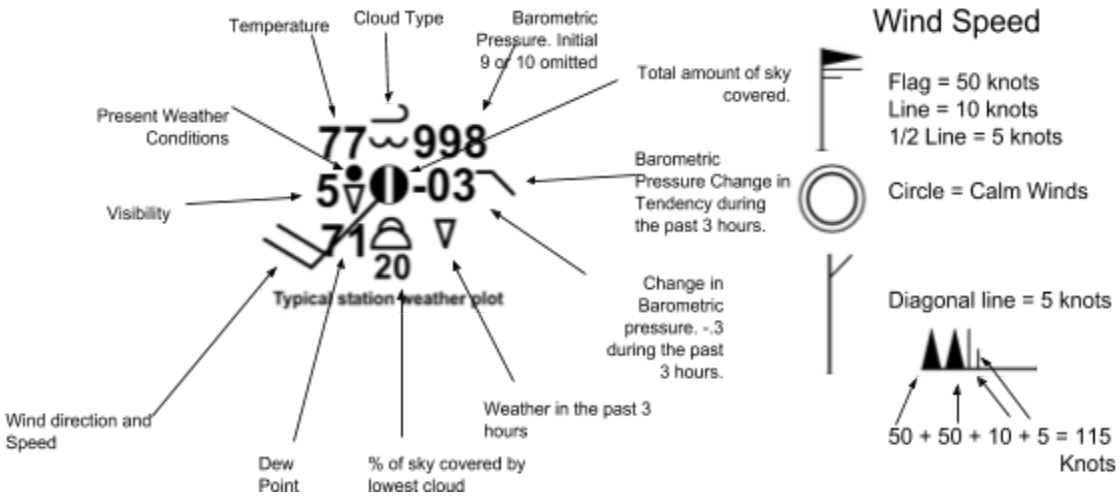
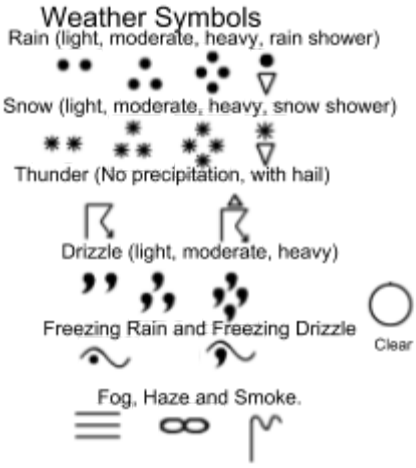
Name: _____

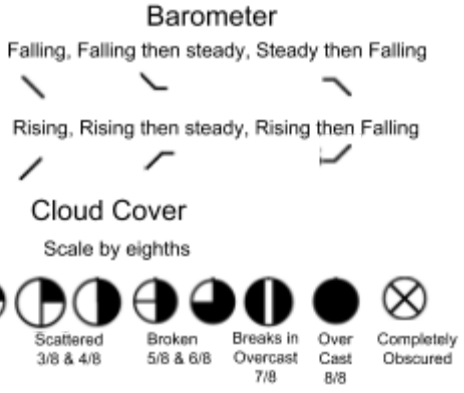
Interpreting Weather Station Models

Meteorologists are scientists that study the weather. They constantly monitor weather models to help predict weather patterns. Weather stations produce models and symbols that are interpreted as to what the current weather is like. The images on this page are keys to interpreting models.



A weather model shows the temperature, air pressure, wind speeds and direction, humidity, dew point, and precipitation. The images on the right will help you interpret weather models. Most of the weather model is easy to interpret. The **barometric pressure**, however, can be a little tricky. The model omits the first 9 or 10 in the number. If the air pressure in the model is greater than 500, place a 9 at the beginning and then a decimal point between the last two digits. If air pressure is less than 500, place a 10 at the beginning and place a decimal point between the last two digits. On a model that has a pressure of 998 is actually a 999.8 mb and a 032 is actually 1003.2. Tools that they might use are satellites, Doppler radar and weather balloons. To interpret the change in pressure correctly, just put a decimal point between the two digits.





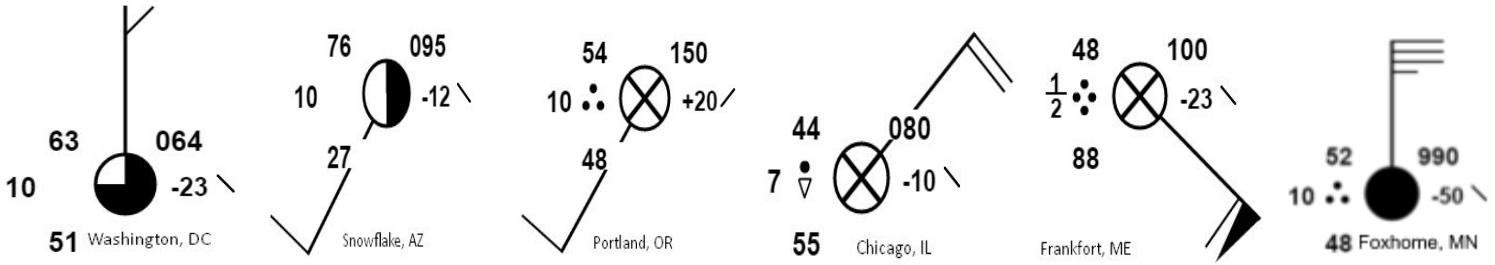
There are thousands of meteorological stations throughout our country that keep a watch out for changes because weather There is always a decimal point between the last two numbers.

Try the following

1. Station model says 103 the actual reading is _____.
2. Station model says 981 the actual reading is _____.
3. Station model says 114 the actual reading is _____.
4. Station model says 972 the actual reading is _____.
5. Change in pressure says +15 the actual reading is _____.
6. Change in pressure says -25 the actual reading is _____.

.Below are weather station models for cities around the country. You can see that they are a bit more basic than the more detailed version on the first page. Interpret the models and fill in the following table.

	Washington, DC	Snowflake, AZ	Portland, OR	Chicago, IL	Frankfort, ME	Foxhome, MN
Temperature						
Dew Point						
Wind Speed in Knots						
Wind Direction						
The pressure in mb.						
Change in Pressure						
Sky Cover						
Visibility						
Precipitation						



Using the following table of weather data, create your own station models.

	Willard, MI	Raleigh Court, VA	Meadow Lark, WY	Sacramento, CA	Barstow, CA	Albuquerque, NM
Temperature	50	52	37	66	77	85
Dew Point	46	51	31	55	32	22
Wind Speed in Knots	10 knots	0	0	15	35	5
Wind Direction	NE	No Wind	No Wind	SE	W	NW
The pressure in mb.	1014.2 Mb	999 Mb	1008.1 Mb	1016.6	1004.2	998.6
Change in Pressure	Steady Barometer	Steady	Falling 1	Rising 2	Rising 1.5	Falling 2.5
Sky Cover	1/8	8/8	8/8	2/8	3/8	6/8
Visibility	10	6	1/4	10	10	10
Precipitation	None	Heavy Rain	Heavy Snow	None	None	Thunder with hail

Willard, MI	Raleigh Court, VA	Meadow Lark, WY
Sacramento, CA	Barstow, CA	Albuquerque, NM