

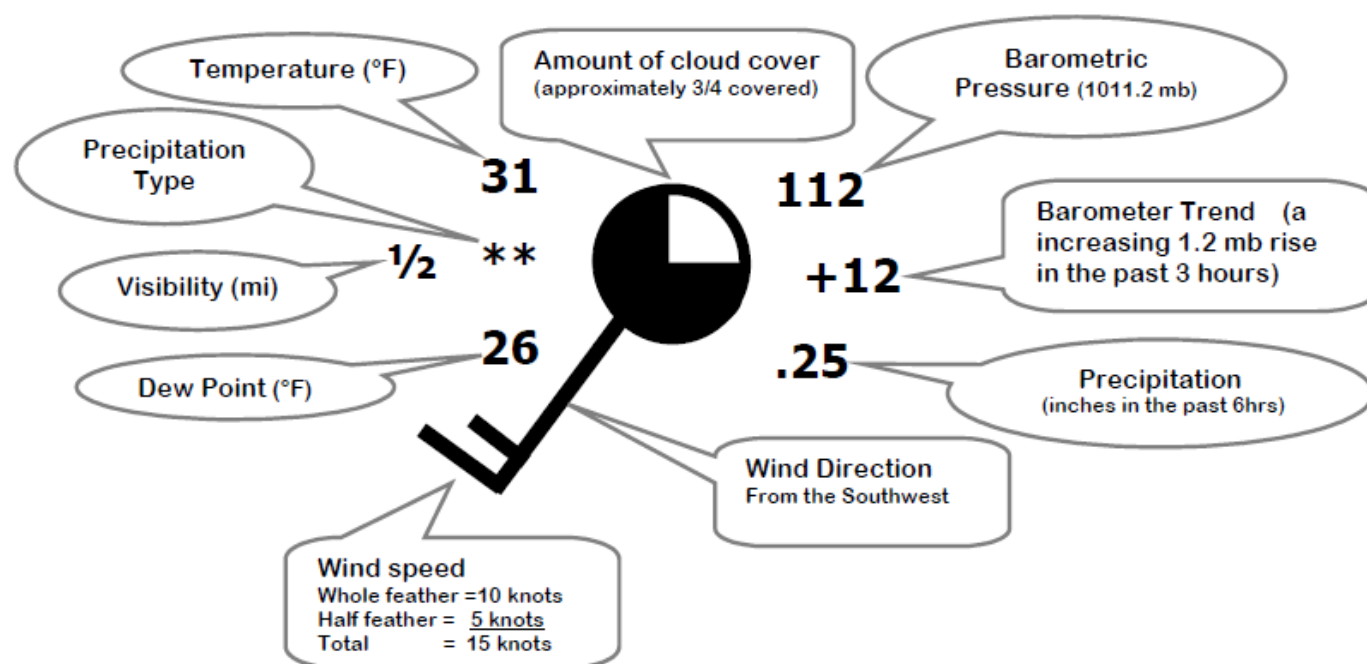
Name _____ Date _____ Period _____

WEATHER STATION MODELS

Activity 1 – Weather Station Models

At commercial airports throughout the country the weather is observed, measured and recorded. These stations record: temperature, dew point, cloud cover, visibility, height of cloud base, amount of precipitation, wind speed and wind direction to name a few. The measurements made every hour at every station around the world.

This is a very large amount of data, which can be very useful in predicting the weather. The challenge is that a large amount of data needs to be communicated to every weather station in the US. Because of the lack of space on weather maps, the weather information needs to be coded. In order to do this the information needs to be highly organized and standard throughout country. By using station models the data can be represented by a symbol or number, and its meaning is easily understood by where the symbol or number is placed on the station model.



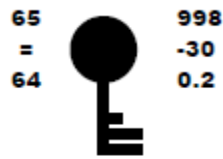
Analysis questions

1. How often are the measurements made to create weather station models?
2. Why do weather station models need to be coded?
3. Where does station model show cloud coverage?
4. How does a weather station model show wind speed (measured in knots)?
5. Where does the weather station model show the barometric pressure?

Activity 2 – Interpreting Weather Station Models

Use the 5 weather station models to decode the weather conditions and record the information in the data table below.

Station 1



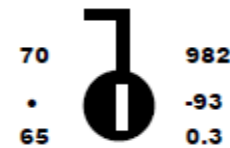
Station 2



Station 3



Station 4



Station 5



Weather Element	Station 1	Station 2	Station 3	Station 4	Station 5
Temperature (F)					
Barometric Pressure					
Precipitation Type					
Cloud Coverage (in 8 th 's)					
Wind Direction					
Wind Speed (knots)					
Dew Point					

Analysis Questions

- Which station has the strongest winds?
- Which station has the lowest barometric pressure?
- Where is the temperature located for weather station models?
- Where is the precipitation type symbol located on a weather station model?
- Explain how to identify the wind direction on a weather station model.