Practice Tips: Weather or Not

USEFUL THINGS TO TRY: Practice with your teacher or at home with a parent.

1. Did you know that you can easily make your tools for measuring things about the weather just by using common household items? Use the directions at the Franklin Institute site provided below to make a barometer, a hygrometer, and an anemometer. Practice taking weather measurements over several days. What does each of these tools tell you?

2. Use an outdoor thermometer to record the temperature outside your house at the same time over a 2-week period. (If you have both scales, record the values in both °C and °F) Make a graph that shows the temperature changes of time. (Plot the °C values and the °F values on separate graphs.) Is there any pattern that you see? Is the pattern on the °C graph the same as the one on the °F graph? Would you see if you measure the temperature twice each day – just before school and just after you get home?

3. Go to the Weather.com site below and look at a current weather map by selecting the “Maps” page in the upper menu bar of the page, then selecting “Regional Satellite.” What weather feature does the Radar map display? If you look at the Clouds map, is there a pattern of motion for the clouds in the southeastern US? Does this pattern match the Radar map’s pattern of motion?

4. Look at a current weather amp (third site below) and identify all the different fronts and high and low pressure systems. Notice where it is raining or snowing and where these areas are relative to any fronts or high or low pressure systems. Try to predict what the weather will be tomorrow.

5. Learn the basic cloud types and practice identifying clouds several times during the day. Notice what types of clouds occur as different types of fronts move through your area. (See the WeatherWhizkids site below.)
6. Ask people to tell you stories about severe weather events they have witnessed. Investigate some of the major weather events and disasters that have been reported in the news. Write a story based on the best one you learned about.

7. Keep a weather journal. Write down the daily temperature, precipitation, humidity and air pressure, and draw or take pictures of clouds. See if you notice any patterns in your measurements – temperature dropping after a cold front passes, for example. Are there more clouds or few clouds when the air pressure is high? You can include plant and animal observations, also! When does the first flower bloom in your yard?

**USEFUL WORDS TO KNOW:**
Here are some representative words you should know.

<table>
<thead>
<tr>
<th>Term</th>
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</thead>
<tbody>
<tr>
<td>anemometer</td>
<td>wind speed</td>
<td>climate</td>
<td>cloud</td>
<td>fog</td>
</tr>
<tr>
<td>hygrometer</td>
<td>humidity</td>
<td>cold front</td>
<td>cirrus cloud</td>
<td>sleet</td>
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<tr>
<td>thermometer</td>
<td>temperature</td>
<td>warm front</td>
<td>stratus cloud</td>
<td>tornado</td>
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<tr>
<td>barometer</td>
<td>air pressure</td>
<td>meteorology</td>
<td>cumulus cloud</td>
<td>monsoon</td>
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</tbody>
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**USEFUL WEBSITES TO SEE:**
We verified these in January, 2015.

- [https://learn.fi.edu/weather/todo/todo.html](https://learn.fi.edu/weather/todo/todo.html) (Franklin Inst: Make your own weather station.)
- [http://www.weather.com](http://www.weather.com) (Check out the Interactive weather maps!)
- [http://www.weather.com/maps/current](http://www.weather.com/maps/current)
- [http://www.nws.noaa.gov/outlook_tab.php](http://www.nws.noaa.gov/outlook_tab.php) (Great general weather site for kids.)
- [http://www.weatherwizkids.com/](http://www.weatherwizkids.com/) (Great general weather site for kids.)

**ADDITIONAL FERNBANK RESOURCES:**

1. Parents and students may come to Fernbank Science Center to examine several weather instruments and practice making readings by using the Weather Kit we have placed on reserve in our Library. (Available from January 5 – March 20, 2015.) Please ask at our Reception Desk for directions: Fernbank Science Center, 156 Heaton Park Drive NE, Atlanta, GA 30307.

2. DCSD public school teachers can request a traveling version of the same kit using the request form on our website:

   - General info about our travelling kits: [http://fsc.fernbank.edu/instructionalmedia.htm](http://fsc.fernbank.edu/instructionalmedia.htm)
   - Media Kit information: [http://fsc.fernbank.edu/MediaKits/Mediakits.htm](http://fsc.fernbank.edu/MediaKits/Mediakits.htm)
   - Request Form: [http://fsc.fernbank.edu/MediaLoanRequest.pdf](http://fsc.fernbank.edu/MediaLoanRequest.pdf)
   - Weather Kit description: [http://fsc.fernbank.edu/MediaKits/weather.htm](http://fsc.fernbank.edu/MediaKits/weather.htm)

**RULE CLARIFICATIONS:**
These apply only to DeKalb’s Elementary Tournament for 2015.

1. Students will be asked to make measurements using actual weather instruments.