**THE WEATHER CYCLER ACTIVITY name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

WEATHER MAPS**

**SECTION A 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **SECTION B 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**SECTION C 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **INTERPRETING WEATHER ON YOUR OWN**

 **SECTION A 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **SECTION B 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **SECTION C 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **SECTION D 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**COMPARING WEATHER CYCLER WITH ACTUAL WEATHER*GO TO THE CLASS CALENDAR AND USE THE LINKS PROVIDED FOR THIS NEXT SECTION***

**Find cities that have the following locations**1. To the north of a high pressure system (above an “H”) <use “Weather at A” on cycler>
2. To the south of a high pressure system (below an “H”) < use “Weather at B” on cycler>
3. To the north of a low pressure system (above an “L”) <use “Weather at A” on cycler>
4. Below the “L” (in between the cold front and the warm front) <use “Weather at B” on cycler>
5. On or slightly to the right of the warm front - <use “Weather at B” on cycler>
6. On or slightly to the right of the cold front - <use “Weather at B” on cycler>
7. Slightly to the west of the cold front - <use “Weather at A” on cycler>

**OBJECTIVE:** For each of the locations (cities) that fit the above descriptions you will compare the predicted weather on the Weather Cycler with the actual weather in those locations.

**DIRECTIONS:**

1. Go to the “classic” weather map and copy the cold and warm fronts and high and low pressure areas on to the map provided. Put the date and time next to the map. Two maps are provided (back and front). On day two of this activity, copy the same information for the second map. In doing this activity, do one city or location at a time. The weather cycler information and the actual weather data should be on the same day.
2. Write the name of all the cities with the weather station data you are using for the particular Weather Cycler. You will do the rest of this assignment in your journal. Each city or location’s information should be recorded on its own page in your journal. Follow the template on the white board for how the information should be recorded on each page.
3. For each city, using the web links provided, find and record the actual temperature, dew point temperature, atmospheric pressure and tendency, wind direction, cloud coverage and weather type . You may write this down as a list or draw a weather station symbol and put the information there (see white board). Also write down the forecast over the next several days.
4. Using the Weather Cycler, find and record the predicted weather for each city (based on where the city is located with regard to the attribute list. What is the wind direction, cloud coverage and type, change in temperature and change in pressure for that city? Record your observations for each of these weather features.

*Change in pressure and temperature should be described as “rising,” “falling,” “rising then steady,” “steady then falling,” etc. Get the idea?*

5. According to the Weather Cycler, what will the weather be like in that city over the next few days? From your original position for your chosen location, pull the cycler to the right one inch, and then another inch. Go back to the original position. Do this again several times and observe the predicted changes in wind direction, cloud coverage and type, change in pressure and change in temperature.

6. Compare the real data with the Weather Cycler information. Focus on (changes in) wind direction, (change in) cloud coverage, (change in) temperature and (change in) atmospheric pressure.

7. Give the Weather Cycler a letter grade based on how close it came to the actual weather. Add a statement that gives an example of how it was accurate or inaccurate.