Name \_\_\_\_\_ Teacher, Day, Time \_\_\_\_\_

**Purpose**

This experiment is designed to help correlate the information learned about weather with some actual observations, and give some practical experience with long-term data gathering and interpretation.

**Procedures**

1. Find a weather information source that contains all the data required. Some possible websites:

 wunderground.com Accuweather.com Weatherbug.com Weather.com intellicast.com

2. Fill out the chart below for THREE days.

**Calculations and Data**

1. Be sure to include units in all of the measurements (e.g. ºF, inches, etc.). Be consistent with the units you use. In other words, do not use ºF for one day and ºC for another. Either use ºF or ºC for all of your temperatures. This applies to the units you use for pressure and precipitation as well.

2. You will observe the weather at TWO different times of the day. Try to use these same times every day for consistency.

3. Record cloud cover in TWO ways:

a) Name the TYPE of cloud(s) that is/are prevailing or dominant at the time of day you observe. You do NOT have to list every type of cloud in the sky.

b) The cloud cover can be recorded as directed in the textbook or in tenths (as follows):

* Imagine that the entire sky in your view as 10 whole parts.
* If the sky is completely clear from your view, you would record 0/10, meaning there are no clouds. (*Don’t include jet exhaust or smoke from industry, homes, etc.*)
* If the sky is completely cloudy, then you would record 10/10, meaning there is no blue sky nor sun.
* Estimate the amount of cloud cover between 0 and 10 out of 10.

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| --- | --- | --- |
| **Track 3 days of Weather** | **Early Cloud Cover & Type** | **Late Cloud Cover & Type** |
| **Date** | **High Temperature** | **Low Temperature** | **High Pressure** | **Low Pressure** | **Total Precipitation** |
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**Conclusion Questions**

*[Answer the questions in complete sentences that convey a complete thought using evidence to support your answers]*

1. What type of clouds and precipitation would indicate a cold front?

2. What type of clouds and precipitation would indicate a warm front?

3. What type of clouds and precipitation would indicate a stationary front?

4. What type of clouds and precipitation would indicate an occluded front?

5. Look at the data on your charts for the three days. Find and show evidence for TWO of the fronts by giving the days, types of clouds and precipitation that match the definitions you wrote above. If the weather did not change, include a second front.

 FRONT 1 = \_\_\_\_\_

 FRONT 2 = \_\_\_\_\_