

Student Worksheet #3: Predicting Weather

Recording Cloud Observations: Questions

Name:

Part 1:

Using the "RECORDING CLOUDS OBSERVATIONS: DATA CHART" that your teacher gave you, go outside to observe the weather and fill in the information about clouds. Try to make your observations at the same time each day for at least one week. If you are using Data Chart #2: Use the information tables at the bottom of your data table to guide your observations. For cloud height, you may be lucky enough to have a local geographic feature to help guide your observations. Otherwise, use "cloud groups" to help identify height. Note that the darker the cloud, the more water it probably contains.

Look for patterns and relationships among the data that you collect. For example, you can learn about the winds aloft by watching clouds move. Often, if there are clouds present at different heights, they may be moving in different directions as they drift with the winds at those heights.

Note: Ideally, data should be collected twice daily. You are more likely to observe trends in the space of a few hours than over a 24-hour period. Therefore, try to arrange with classmates to share data if you cannot make your own observations.

Part 2:

When you have gathered all of your data, use the information to answer these questions:

1. What fraction/percentage of the sky was covered most often?
2. What cloud group did you observe most often?
3. When skies were cloudy, were there high, middle or low clouds most often?
4. From what direction did clouds come most often?

5. What relationship(s) did you notice among the observations that you made? (For example: Low clouds are usually darker gray).

6. How can you tell whether clouds might contain water droplets or ice crystals?

Part 3:

Now use your data chart and questions to write a detailed lab report about "Watching Clouds!" Use the space below as your draft:

Adapted from NOAA's "Anatomy of a Cloud" lesson
at http://www.fsl.noaa.gov/outreach/education/samii/SAMII_Activity1.html