

Chapter 15**LABORATORY MANUAL****• Clouds 43**

Clouds are tiny droplets of water or crystals of ice suspended in the air. There are three basic cloud forms: cirrus, stratus, and cumulus. Clouds are also classified by their height above ground level. High clouds are designated by the prefix *cirro*, and middle clouds by the prefix *alto*. Low clouds have no prefix. Clouds that produce precipitation have the prefix *nimbo* or the suffix *nimbus* added. A cirro-stratus cloud is a high, layered cloud. A nimbostratus cloud is a low, layered, precipitation-producing cloud.

Clouds often indicate weather changes. By learning to recognize the different kinds of clouds and their relative positions in the sky, you sometimes can predict the coming weather.

Strategy

You will observe and identify clouds.

You will observe and record the weather associated with the clouds.

Materials

"Cloud Code Chart" (pictures and/or descriptions of clouds)

Procedure

1. Observe and record the cloud cover and cloud type once a day for a week. Try to make your observations at the same time each day. Observe and record the general weather also. Record all data in Table 43-1.
2. Estimate cloud cover. Record the cloud cover using the following symbols and abbreviations:
 - CLF = Free of clouds
 - SCT = Scattered clouds (half or less of sky covered)
 - BKN = Broken clouds (more than half of sky covered, but blue still showing through)
 - OVC = Overcast (no blue visible)
 - X = Obscured (fog, smoke, or haze completely covers the sky)
3. Use the following symbols to record the type(s) of clouds you observe:
 - Ci—Cirrus
 - Cu—Cumulus
 - St—Stratus
 - Cb—Cumulonimbus
 - Ns—Nimbostratus
 - Ac—Alto cumulus
 - As—Altostratus

You can also name any other type of cloud not specifically listed above.

Data and Observations

Table 43-1

Date	Time	Cloud cover	Cloud type	Weather

Questions and Conclusions

1. Based on your observations, write a description of each of the three basic cloud forms.

2. What type of weather is associated with cirrus clouds? _____
3. What type of weather is associated with cumulonimbus clouds? _____
4. What type of weather is associated with cumulus clouds? _____
5. What type of weather is associated with nimbostratus clouds? _____

Strategy Check

- _____ Can you observe and identify clouds?
- _____ Can you observe and record weather?