**NAD Weather Honor Requirements**

1. Explain how each of the following is formed: fog, rain, dew, snow, hail, frost.
2. Identify either in the sky or in pictures, the following types of clouds: cirrus, cumulus, stratus, nimbus. What kind of weather is associated with each?
3. What causes lightning and thunder? What different kinds of lightning are there?
4. Why is it possible to be rainy on one side of a mountain range and dry on the other? Give an illustration for your country or region.
5. Why is it cooler and moister in the mountains than in the lowlands?
6. From which direction do rain and clear weather usually come in your locality?
7. With the help of a diagram show what a convection is? What is its relation to wind?
8. Explain the action of a mercury or spirit thermometer, a mercury barometer, an aneroid barometer, and a rain gauge.
9. Show, with the help of a diagram, how the earth's relationship to the sun produces the seasons.
10. Tell how the following can affect our weather:
11. Jet streams

b.  Volcano eruptions

1. Explain how radar, satellites and computers are used in weather forecasting.
2. Make a drawing showing the water cycle in weather.
3. Make a simple wind vane or rain gauge.
4. Keep a weather chart for one week and record readings at twelve‑hour intervals. Include the following:
5. temperature
6. moisture (dew, fog, rain, frost, or snow)
7. cloud formation

d.      wind direction