

**I. Objectives**

1. Demonstrate what you have learned about the causes and consequences of various weather phenomena.
2. Work as a member of a team in a coordinated research effort.
3. Use your creativity and critical thinking skills in constructing, organizing, and evaluating your team's materials.
4. Create a professional and informative poster.
5. Share and communicate what you have learned with others.

**II. Introduction**

No other physical element of Earth's environment is likely to impact and affect the lives of human beings on a daily basis any more importantly, and often as strikingly, than the weather does. It is also true that models, and observational tools and methods at the disposal of the "modern" meteorologist are greatly aiding in improving the accuracy of severe weather predictions and the issuance of better advance warnings for dangerous and destructive events like tornadoes, hurricanes, flash floods, and lightning, to name a few. Our rapidly advancing detailed knowledge of many weather phenomena involves interesting aspects of physical geography as well.

In addition to those weather phenomena which often threaten lives and property, a host of others which may or may not be hazardous to people can be studied scientifically and otherwise appreciated solely for their intrinsic complexity, magnitude, and beauty.

### III. Lab Procedure

1. For this project, you and your team will be constructing a standard-sized 36" x 24" poster. Please select one of the following topics:
  - a. dust devil
  - b. dust storm
  - c. flash flood
  - d. fog
  - e. hail
  - f. hurricane
  - g. lightning
  - h. rainbow
  - i. snow
  - j. tornado
2. You will then need to locate materials related to your selected weather phenomenon topic. In addition to current technical information, these may include weather folklore, historical descriptions, maps, drawings, photographs, and other written information about the topic.
3. You **may** use whatever sources you like but you must keep track of the sources for everything that you obtained from the internet, magazines, books, etc. and information about that source **must** be included. **No references, no credit, no exceptions.**
4. You **may not** simply copy and post materials located from the sources above. You will need to coordinate your materials with the other members of your team, and include only materials that are relevant. **All text must be typed.**
5. Everyone on your team will receive the same grade (unless a team member doesn't cooperate and participate). Your completed poster is due on the date listed in the syllabus and/or specified by the instructor.
6. Your grade will be based on:
  - a. *organization*: are the materials you selected well organized on the poster?
  - b. *research*: were your research efforts adequate and appropriate in locating a wide variety of information on your topic?
  - c. *clarity*: did you select materials that can be understood by others both in and out of the class?
  - d. *conciseness*: did you only include materials that are relevant to your topic?
  - e. *professionalism*: does your poster have a professional appearance? is it interesting and informative?