

5. How's The Weather

Classroom Activity:

Investigate major climatic factors associated with weather, and design and construct a variety of instruments for recording various weather features. Students learn to gather and graph data, predict patterns and recognize variables.

The topic of weather is no longer addressed in the revised elementary science and technology curriculum. This task has now been categorized as "OTHER"

This task addresses the following learnings:

- Demonstrate an understanding of the major climatic factors and patterns associated with weather.
- Design, construct and test a variety of weather instruments.
- Predict local weather patterns using data from their own observations and weather reports

Assessment Categories:

- Thinking and Investigation
- Communication

Type of Activity: small group work

Preparation: (approx. 35 minutes)

Models of the instruments to be used need to be made: barometer, thermometer, anometer, hygrometer, rain gauge. To save time, the stands for the anometers should be made ahead of time.

Detailed Instructions for the construction of the weather instruments can be obtained from the Engineer-in-Residence program office at (416) 481-7070.

Time needed to complete the task: 75 minutes (10minutes/day for 5 days)

Materials/Resources for teachers:

Directions on how to make the instruments

Samples of instruments to be made

Real instruments for comparison



Materials/Resources for students:

Directions on how to make the instruments (1 package per group) ruler, scissors, glue, tape, straws, plasticene, balloons, bottles, recipe cards, food colouring, wood, indelible marker.

Activity Description:

The engineer or teacher or both give(s) background information on weather, meteorology and prediction. Students are put into pre-assigned groups of three, given the instructions and then construct the barometer, thermometer and anometer. Each student makes their own rain gauge to take home and place in the appropriate location to monitor rainfall.

Students gather and record weather information with their instruments for five days and compare their results (temperature, pressure, precipitation etc.) with the experts on television.

Students use graphs to display data.

Students make presentations and discuss variables.

Tips:

Follow-up activities might include a visit from a meteorologist with a discussion of weather-related professions.