

Title: Weather & Water (4104)

Level: 1<sup>st</sup> Grade Location: Local School Type:OutreachLength:55 minutesLimit:One class per session

## Program Description

Students will discuss the day's weather, and learn why instruments are used to precisely describe the weather. Students will investigate and manipulate thermometers in a hands-on activity. Evaporation, cloud formation, the water cycle, and precipitation types will be explored via classroom demonstrations.

# **Standards**

**S1E1.** Obtain, evaluate, and communicate weather data to identify weather patterns.

d. Analyze data to identify seasonal patterns of change.

**b.** Ask questions to identify forms of precipitation such as rain, snow, sleet, and hailstones as either solid (ice) or liquid (water).

**c.** Plan and carry out investigations on current weather conditions by observing, measuring with simple weather instruments (thermometer, wind vane, rain gauge), and recording weather data (temperature, precipitation, sky conditions, and weather events) in a periodic journal, on a calendar, and graphically.

## **Vocabulary**

evaporation thermometer temperature condensation measure liquid precipitation thunderstorm solid hail rain sleet snow gas (water vapor) season

## **Pre-Visit Activities**

Introduce the class to the vocabulary words listed above.

## Post-Visit Activity

Observe and discuss how weather changes day to day, month to month, and through the seasons.

- If it snows, measure the snow depth in several places. Calculate the average of all of your depth measurements; this is the snowfall.
- Push the open end of a cylinder fully into the snow, then pull it out. The depth of snow in the cylinder should match your snowfall. Melt the snow in the cylinder, pour the water into a rain gauge, and see how much water was contained in the snow.

## Additional Resources

http://www.nssl.noaa.gov/education/educators/

## <u>Notes</u>

It is best if the Fernbank instructor for this program can set up equipment and materials in a central location at your school (science lab, media center, classroom, etc.) for the day. Each class can make their visit to the central location for the program.