



WEATHER WONDERS

Level: **Grades 6-8**Length: **45 minutes**

PROGRAM DESCRIPTION

Weather is around us all the time, but how much do we really understand the processes behind the wind and rain and sun of daily life? Explore the wild world of weather through interactive demonstrations and discussion. Students will discover why weather changes, how clouds form, and the innerworkings of extreme weather events—all without getting wet.

CURRICULUM CORRELATIONS

Students will:

- Identify the difference between weather and climate.
- Recognize the role of the sun and uneven heating in weather systems. **S6E3b; S6E4b,c; S8P2d**
- Discover the water cycle, resulting cloud types, and different forms of precipitation. **S6E3; S6E4e**
- Recognize weather instruments and maps how to identify fronts and their associated weather. **S6E4c**
- Explore large weather systems: thunderstorms and lightning, hurricanes, and tornadoes. **S6E4d; S8P5b**

ESSENTIAL QUESTION

In what ways is Earth an *active* and *changing* system?

PROGRAM VOCABULARY

Climate
Static ElectricityCold Front
Stationary FrontConvection
Warm FrontCyclone
Weather

ASSOCIATED VOCABULARY

Air Pressure
Condensation
Water CycleAnemometer
Precipitation
Wind VaneBarometer
Rain GaugeClouds (alto, cirrus, etc.)
Thermometer

PRE-VISIT ACTIVITIES

As a class, review vocabulary and have students write about personal experiences they have had with weather. Research different major weather events and plot the types and dates on a map.

AT THE MUSEUM

Visit **Fantastic Forces** to observe the many and varied forces of Earth, including tornadoes and lightning.

POST-VISIT ACTIVITIES

Make a weather journal for the class to record information over a set period of time. Create your own weather instruments to help measure the daily data. Have students divide into groups and present weather forecasts to the class based on collected data and meteorology reports.