

## Scientific Careers in Weather

### Meteorologist

A scientist who studies \_\_\_\_\_

- \_\_\_ Identify the metric units used to measure wind speed
- \_\_\_ Calculate the mean and median wind speed for a five-day period
- \_\_\_ Graph and analyze wind speed for a twelve-month period
- \_\_\_ Describe cold and warm fronts and the weather associated with each
- \_\_\_ Conduct a survey to determine the most common type(s) of severe weather in your area over the past 30 years
- \_\_\_ Design an instrument to measure wind direction or speed
- \_\_\_ Predict the weather based on current weather maps
- \_\_\_ Calculate the change in air temperature for a growing city over a period of time

### Hydrologist

A scientist who studies \_\_\_\_\_

- \_\_\_ Identify the metric units used to measure precipitation
- \_\_\_ Calculate the mean and median precipitation for a five-day period
- \_\_\_ Graph and analyze precipitation data for a 12-month period
- \_\_\_ Describe the amount of the earth's surface covered by water
- \_\_\_ Investigate how well different solids dissolve in water
- \_\_\_ Investigate how well water flows through different earth materials
- \_\_\_ Describe at least three different ways in which water changes from one state to another
- \_\_\_ Evaluate the impact of the population of a city on the city's water supply

### Climatologist

A scientist who studies \_\_\_\_\_

- \_\_\_ Identify the metric units used to measure temperature
- \_\_\_ Calculate the mean and median temperatures for a five-day period
- \_\_\_ Graph and analyze temperature data for a twelve-month period
- \_\_\_ Describe six different climate types
- \_\_\_ Construct and interpret a climate graph
- \_\_\_ Investigate how energy from the sun heats earth surfaces
- \_\_\_ Describe how latitude and ocean currents affect climate
- \_\_\_ Identify local factors that affect climate

### Atmospheric Scientist

A scientist who studies \_\_\_\_\_

- \_\_\_ Identify the metric units used to measure air pressure
- \_\_\_ Calculate the mean and median air pressure for a five-day period
- \_\_\_ Graph and analyze temperature data for a twelve-month period
- \_\_\_ Explain how the earth's atmosphere changes with altitude
- \_\_\_ Design a tool to measure wind direction or speed
- \_\_\_ Investigate how the earth's atmosphere has changed over billions of years
- \_\_\_ Describe several air pollutants in the atmosphere and their source
- \_\_\_ Evaluate the change in air pollution for a city over a period of time