

Lake Mead

Environmental Education

National Recreation Area
National Park Service



Classroom Program - Grade 3

"Weather Wise"

- Theme** There are many contributing factors that create the weather we experience in the Mojave Desert.
- Objectives** Students will compare, measure, record, and describe air temperature, wind direction and speed.
Students will describe at least two factors that create the conditions that they experience in the Mojave Desert.
Students will describe two types of clouds.
- Vocabulary** compass - an instrument used to locate direction
meteorologist - someone who studies the science of weather and weather forecasting
rain-shadow desert - a type of desert created when prevailing winds, carrying moist coastal air up and over mountain ranges, lose moisture on the mountain slopes facing the winds; rainshadow deserts form on the far side of the mountain ranges
thermometer - an instrument used to measure temperature
wind meter - an instrument used to measure wind speed
- Background Information** Does this weather forecast sound familiar? Clear skies, sunny and hot, highs 105 to 115 degrees Fahrenheit. That's exactly what most people remember about weather in the Mojave Desert. High seasonal temperatures and little rainfall (average 4 to 6 inches annually) are just two weather conditions that are found in this environment. High rate of evaporation, wind and varying air temperatures from night to day are also key factors that determine our weather. When rain occurs it is distributed unevenly throughout the year. Weather patterns often create short, violent downpours, with much of the water from these storms running off before it can soak into the soil.
- Before the Ranger Visits your Classroom** As a group, locate the Pacific Ocean and the state of California on your class United States map. From California, take the route of prevailing winds moving east until you can locate the Sierra Nevada Mountain Range. Cross over the mountain range and locate the city or town where you live. Can you also find Lake Mead National Recreation Area? Locating the Sierra Nevada Mountain Range and Lake Mead NRA on the map will better prepare the class for understanding the relationship of the geography and the weather of the Mojave Desert.
- After the Ranger Visits your Classroom** Now that your students have had experience with measuring and recording the weather at the school, create a weather station corner. Keep a daily weather journal and compare the weather at your school with another area that is not in a desert environment. You could choose another major city or even another National Park Service site.



Teachers! - check out our new web site at <http://www.nps.gov/lame/classindex.htm>