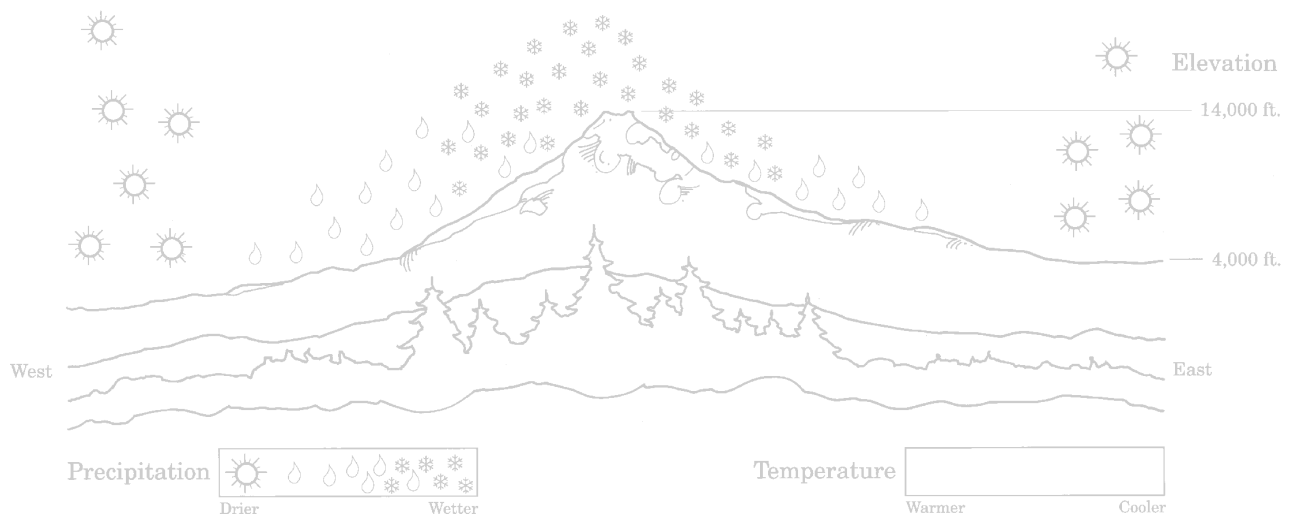


Climate is What You Expect, Weather is What You Get



Meets Standards/Benchmarks:

- Science 1.0 Scientific Investigation: Identify & evaluate alternative explanations & procedures
 - 1.2 Using examples to demonstrate that scientific ideas are used to explain previous observations and to predict future events
 - 1.3 Asking questions and stating hypotheses that led to different types of scientific investigations
 - 1.6 Interpreting and evaluating data in order to formulate conclusions
 - 1.7 Communicating results of their investigations in appropriate ways
 - 1.9 Explaining that scientific investigations sometimes result in unexpected finding that lead to new questions and more investigations
- Science 4.0 Earth and Space Science: Students know and understand the processes and interactions of Earth's systems and the structure and dynamics of Earth and other objects in space.
 - 4.1 Students know and understand the general characteristics of the atmosphere and fundamental processes of weather.
- Geography 3.0 Students understand how physical processes shape Earth's surface patterns and systems.
 - 3.1 Students know the physical processes that shape Earth's surface patterns.



Strand; Concept: *Patterns; Climate and ecosystems distribution

Assessment Objective:

To determine a student's level of proficiency in organizing and interpreting data.

Task:

Students will organize, interpret, and make predictions using weather data that has been provided by the Colorado Climate Center.

**If you choose to use this activity as an assessment activity, you may want to have students present an individual interpretation of the data.*

Score the activity by marking the bubble that best describes the student's level of achievement.

Student:	Class:	Grade:
4	The data is organized in a clear, understandable way. The interpretations of the data include all aspects of weather, i.e., temperature, humidity, moisture, wind direction and speed. The student's interpretation clearly shows that the student recognizes patterns and changes in weather. Predictions based on collected data are detailed and reasonable.	
3	The data is organized in a clear, understandable way. The interpretations of the data include some aspect of weather, i.e., one or more of the following are left out: temperature, humidity, moisture, wind direction and speed. The student's interpretation of the data shows that the student recognizes changes in weather over time but does not clearly show the student recognizes patterns in weather. Predictions based on collected data lack detail but are reasonable.	
2	The data is not organized in such a way that it is easily understood. The interpretations of the data include only one or two aspects of weather. The student's interpretation of the data shows that the student does not recognize changes or patterns in weather over time. Predictions are loosely based on the data.	
1	The data is not organized so that it is understandable. The student made little effort to interpret the data. No attempt was made to show pattern in weather. Predictions are not evident.	

SCORING GUIDE