

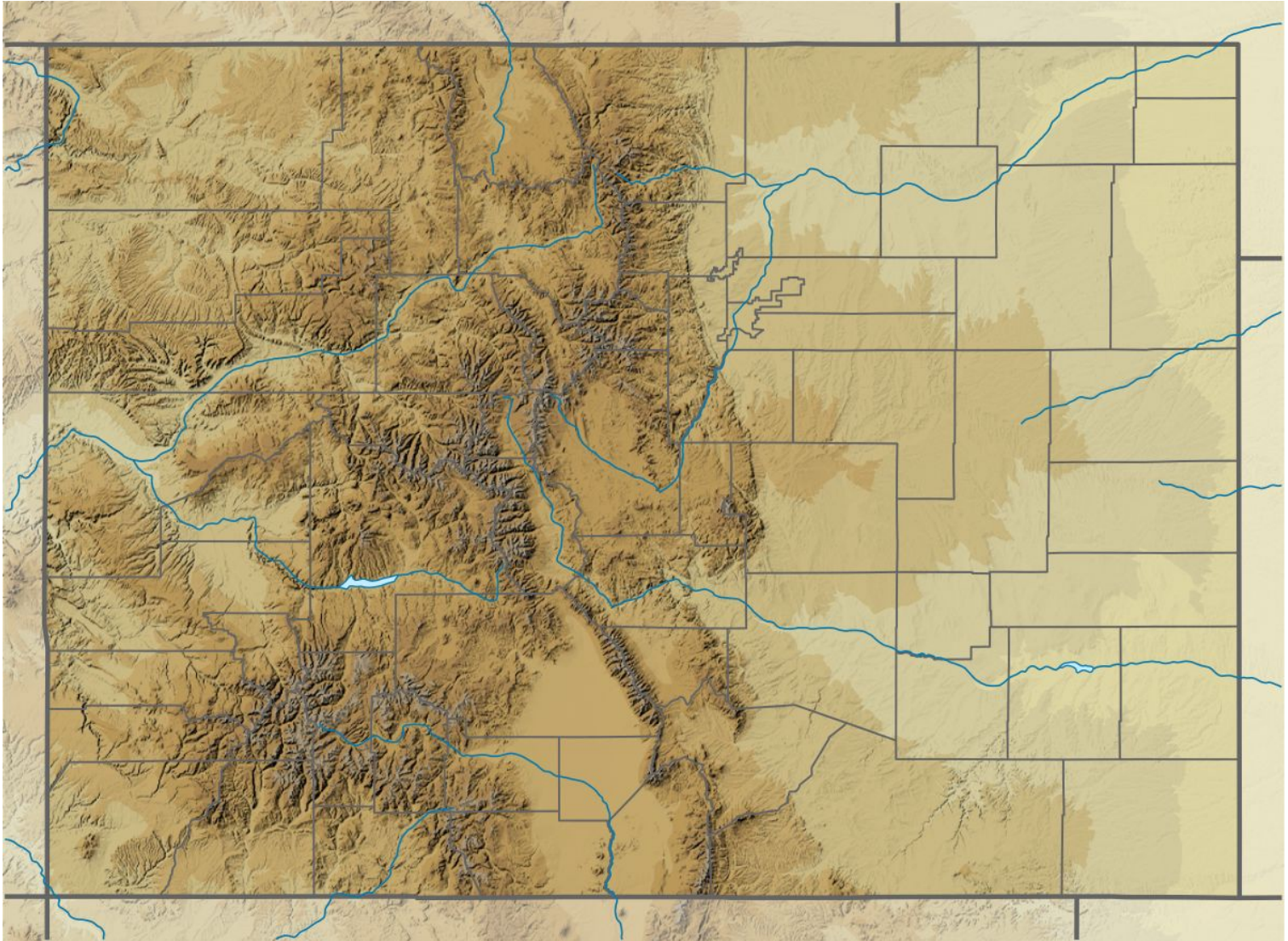


# Colorado Weather



Name \_\_\_\_\_ Class \_\_\_\_\_

Welcome to Colorful Colorado! In this activity you will be learning about what influences the weather in the Centennial state.



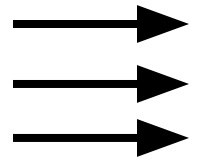
## Terrain

The terrain in Colorado is varied, from the lowest point of 3,315 feet above sea level along the Arikaree River near Wray, Colorado to the highest point of 14,440 feet above sea level at the top of Mt. Elbert. Mountain peaks and ridges can influence the weather of Colorado by changing air movements. Other terrain features that influence weather are the Cheyenne Ridge, Palmer Divide, Continental Divide and San Luis Valley.

**Label the following locations on your map:** Mt. Elbert, Cheyenne Ridge, Palmer Divide, Wray, the Continental Divide and where you live.

## Jet Stream

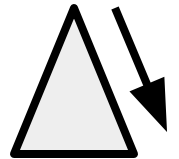
The Jet Stream is the circulation of strong winds around the world at about 30,000 feet. The Jet Stream is sometimes over Colorado, or at times to our north or south. The general flow of the Jet Stream is from West to East.



**Draw some arrows pointed east on your map and label them Jet Stream.**

## Downslope

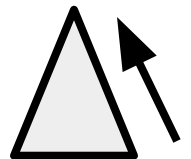
Downslope winds are winds that flow downhill of steep terrain. As wind moves downhill where air pressure is greater, the air warms up. If downslope winds are affecting you, the weather is often windy and warm.



**Draw some arrows pointing down step mountains and label them Downslope.**

## Upslope

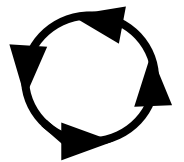
Upslope winds are winds that flow uphill along steep terrain. As wind moves uphill it cools in temperature. The moisture in the cooling air condenses, creating clouds and precipitation. Upslope winds can lead to rain and snow.



**Draw some arrows pointing up step mountains and label them Upslope.**

## Denver Cyclone

The Denver Cyclone is a rotation of air that occurs when wind moves north from the south over the Palmer Divide. The cyclonic (counter-clockwise) circulation of wind that forms downstream of the Palmer Divide is often centered near Denver. Severe weather including tornadoes can occur with the Denver Cyclone.



**Draw a circle of arrows in the middle of the Cheyenne Ridge to the north, Palmer Divide to the south and foothills to the west.**

## Colorado Weather Records

Label each Colorado Weather Record on your map. These are all records as of February 2023. For up to date records, go to the Colorado Climate Center,

<https://climate.colostate.edu/records.html>.

### Largest snowfall in 24 hours

75.8 inches  
April 14-15, 1921  
Silver Lake

### Largest precipitation in 24 hours

11.85 inches  
September 12, 2013  
Fort Carson

### Largest Hailstone

5.25 inches  
August 8, 2023  
Yuma County

### Minimum Temperature

-61°F  
February 1, 1985  
Maybell

### Maximum Temperature

115°F  
July 20, 2019  
John Martin Dam