



Tale of Two Seasons



Name _____ Class _____

For this activity you will be using average and extreme temperature records from NOAA's Physical Sciences Laboratory located in Boulder, Colorado. For updated information, you can go to <https://psl.noaa.gov/boulder/dailyrecords/>.

Winter

| December | |
|---|-------------|
| Record High | 76°F, 1965 |
| Normal High (average of each day average high) | 45°F |
| Record Low | -24°F, 1990 |
| Normal Low (average of each day average low) | 22°F |

| January | |
|---|-------------|
| Record High | 74°F, 1925 |
| Normal High (average of each day average high) | 44°F |
| Record Low | -33°F, 1930 |
| Normal Low (average of each day average low) | 20°F |

| February | |
|---|-------------|
| Record High | 79°F, 1954 |
| Normal High (average of each day average high) | 46°F |
| Record Low | -28°F, 1936 |
| Normal Low (average of each day average low) | 22°F |

Summer

| June | |
|---|-------------|
| Record High | 104°F, 1954 |
| Normal High (average of each day average high) | 80°F |
| Record Low | 30°F, 1951 |
| Normal Low (average of each day average low) | 53°F |

| July | |
|---|-------------|
| Record High | 104°F, 1954 |
| Normal High (average of each day average high) | 85°F |
| Record Low | 40°F, 1921 |
| Normal Low (average of each day average low) | 59°F |

| August | |
|---|-------------|
| Record High | 102°F, 1936 |
| Normal High (average of each day average high) | 84°F |
| Record Low | 37°F, 1910 |
| Normal Low (average of each day average low) | 58°F |

Weather History

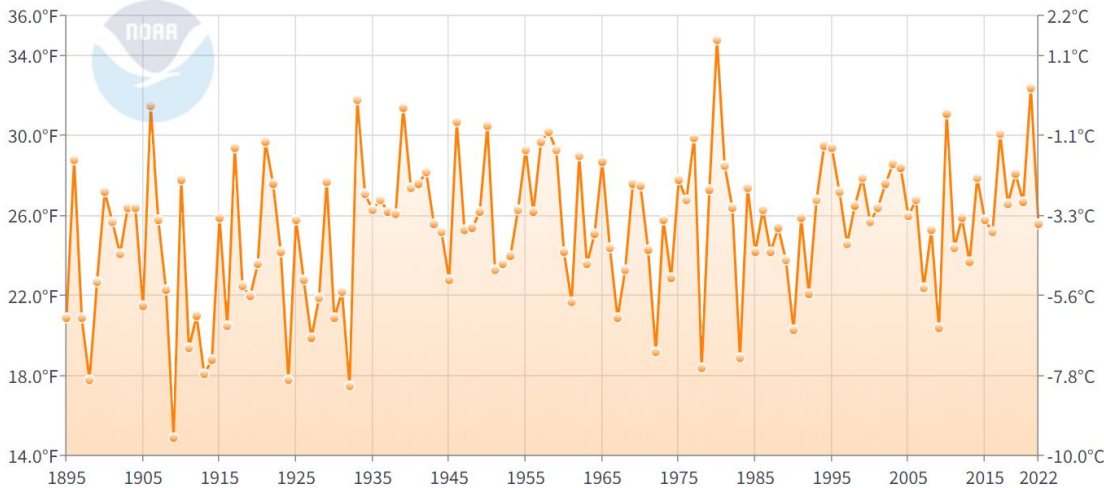
Want to look up weather events on a particular date? Visit this site <https://www.weather.gov/bou/wxhistory>, enter any date you want, and learn some weather history from the National Weather Service in Boulder.

NOAA's National Centers for Environmental Information archives NOAA data. Here are 6 charts, one for each of the following months: December, January, February, June, July, and August. You will see the average temperature in Colorado over the entire month for each year between 1895-2022. This information can be found here:

<https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/statewide/time-series>

Colorado Average Temperature

December



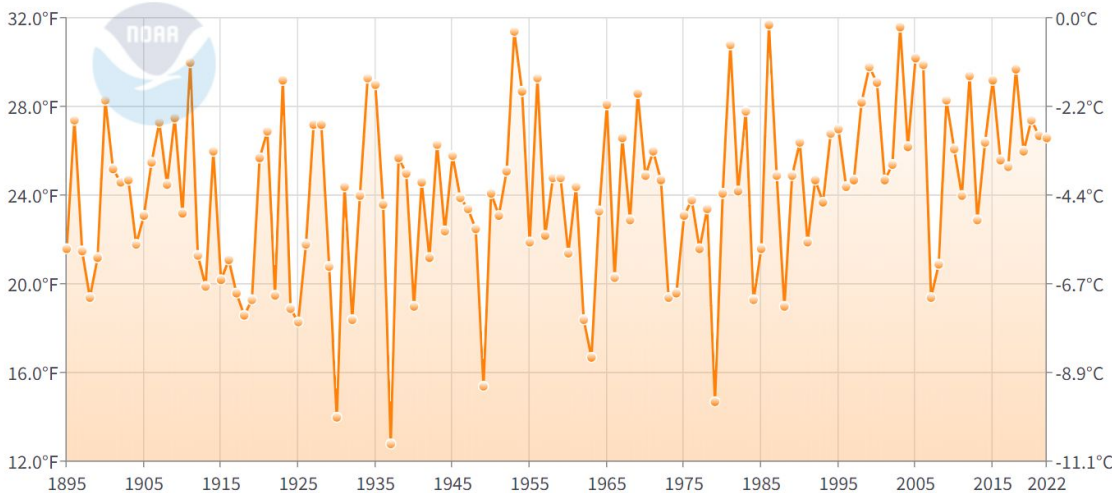
Winter

December

| | |
|--------------------------------------|-------|
| Which year had the coldest December? | Year: |
| | Temp: |
| Which year had the warmest December? | Year: |
| | Temp: |

Colorado Average Temperature

January

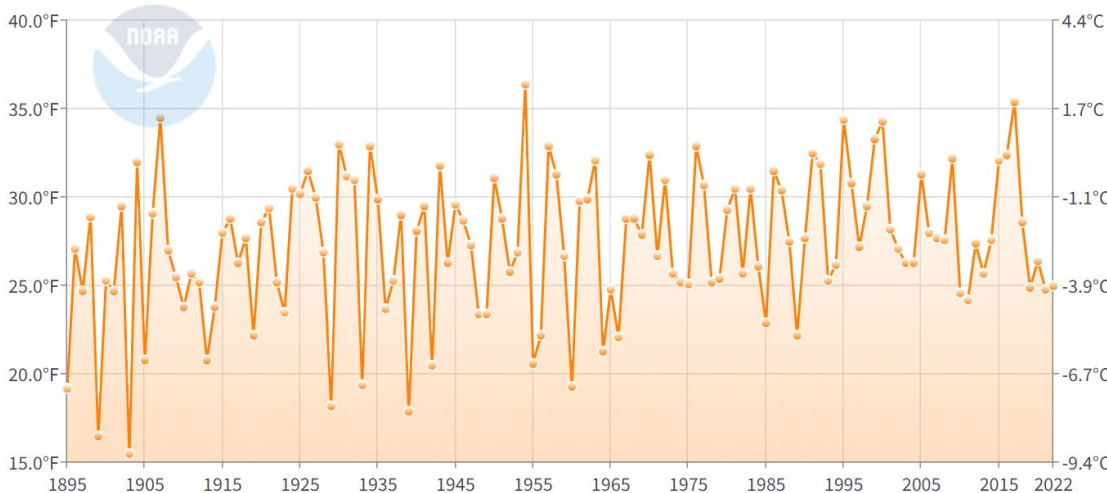


January

| | |
|-------------------------------------|-------|
| Which year had the coldest January? | Year: |
| | Temp: |
| Which year had the warmest January? | Year: |
| | Temp: |

Colorado Average Temperature

February



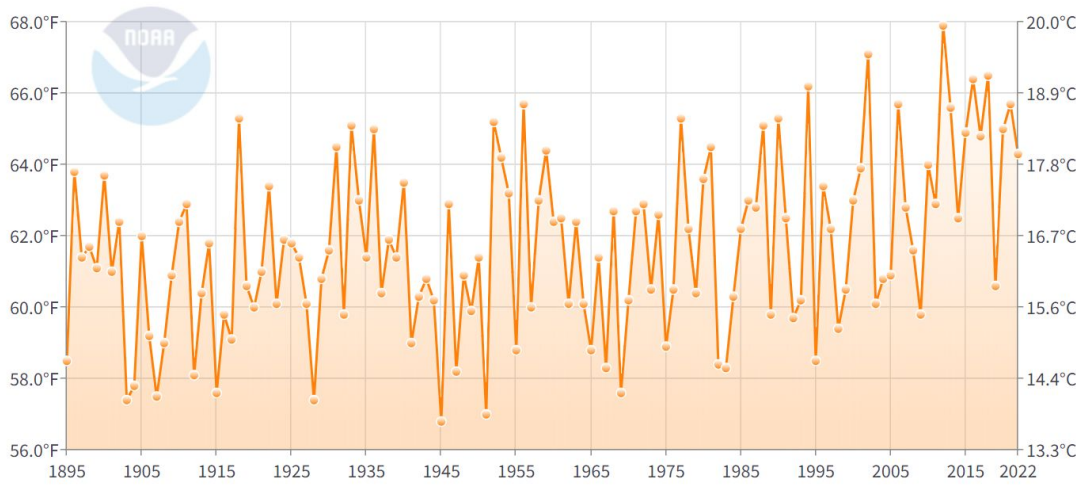
February

| | |
|--------------------------------------|-------|
| Which year had the coldest February? | Year: |
| | Temp: |
| Which year had the warmest February? | Year: |
| | Temp: |

Summer

Colorado Average Temperature

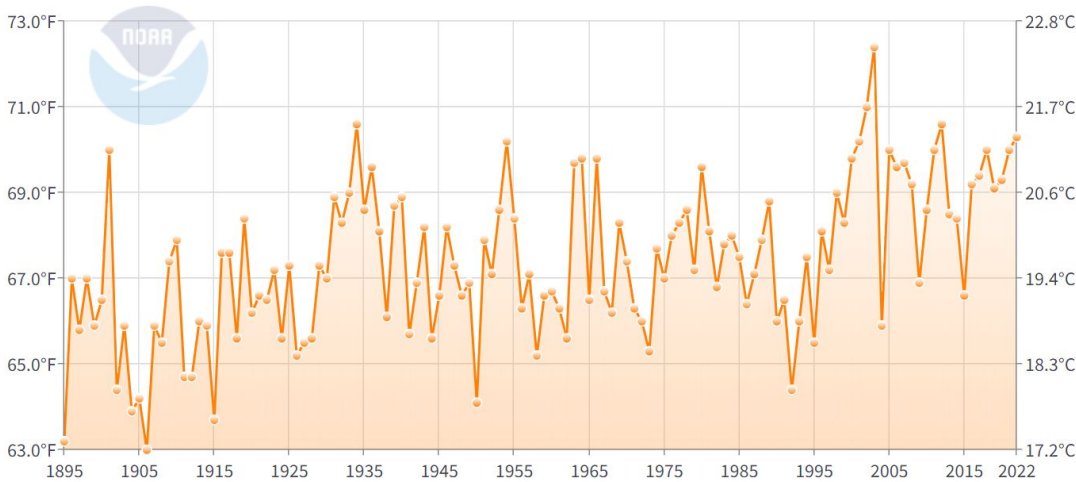
June



| June | |
|----------------------------------|-------|
| Which year had the coldest June? | Year: |
| | Temp: |
| Which year had the warmest June? | Year: |
| | Temp: |

Colorado Average Temperature

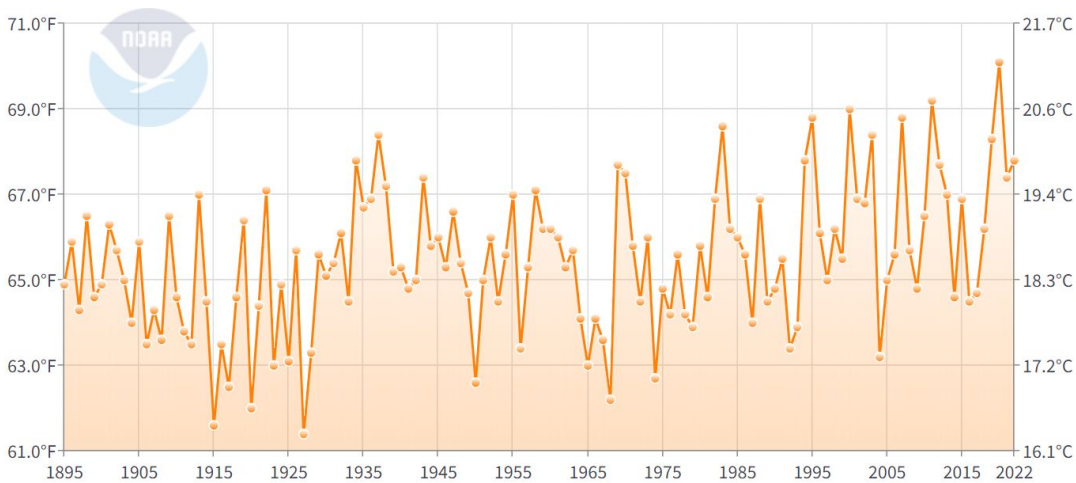
July



| July | |
|----------------------------------|-------|
| Which year had the coldest July? | Year: |
| | Temp: |
| Which year had the warmest July? | Year: |
| | Temp: |

Colorado Average Temperature

August



| August | |
|------------------------------------|-------|
| Which year had the coldest August? | Year: |
| | Temp: |
| Which year had the warmest August? | Year: |
| | Temp: |

What are your observations from the graphs? Discuss trends you see. Are temperatures increasing or decreasing over time? Is this trend stronger in the winter or summer?

Compare the information in the first page charts with the 1895-2022 graphs. How is the information similar, and how is it different?

Which winter month is the coldest? Which winter month is the warmest?

Which summer month is the coldest? Which summer month is the warmest?

Why is the temperature so different in the summer compared to the winter?

Which cities and/or states do you think have similar climates to Boulder and/or Colorado? _____
