DRAFT

What time of year do wildfires happen?

NOAA Storm Event Data Analysis Instructions

1. Go to the NOAA Storm Events Database:
   https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO

2. State/Area should be selected for COLORADO

3. Select 01/01/2001 for Begin Date, and 12/31/2019 for End Date

4. Select "All" for County.

5. Select "Wildfire" for Event Type

6. Click "Search"

7. A data table should appear. Highlight text in the entire data table (all columns and rows), press Control C (to copy).

8. Open a Google Sheet and Name it "Wildfire Data"

9. In the bottom left-hand corner, click the drop-down arrow on the Sheet 1 tab and rename it "Raw Data".

10. Click in cell A1, press Control V to paste the data

11. Label cell D1:"Date"

12. Copy all the data in column D. In the bottom left-hand corner of the screen, click the "+" button to add a new sheet. Change its name from "Sheet2 to "Month"

13. Click in cell A1 and paste the data.

14. Select Column A.

15. Click Data→ Split text to columns

16. A small window will open near the bottom left of the screen. Next to the word "Separator", Choose "Custom", and Type a forward slash "/" which will separate the date into 3 columns.

17. Label cell A1 "Month", cell B1 "Day", and cell C1 "Year"

18. Be careful here: Select the whole data set, click Data-->Sort range by Column A, A→ Z (the 1st option down). This will sort by month.

19. In column E1, type "Month", and in F1, type "Number of Wildfires Ignited"

20. Hide Columns B and C by highlighting the columns, right clicking, and selecting "Hide Columns B-C".

21. In the new Month column, type the names of all the months below the column title (January, February, March…)

22. Count the number of wildfires that began in each of those months. For example, how many wildfires ignited in January, February, March, April….*An easy way to do this is highlight the number of cells for each month (for example, highlight all the cells with the number 3 in the month column for March), and look at the bottom right corner of the screen. A little dropdown box appears that says "Sum:##". Click on the dropdown and select "Count". This will tell you how many cells are highlighted, giving you the number of wildfires that began in that month.

23. Make sure your total number of wildfires matches the total number of wildfires in the data set.

24. Highlight this new data table that you've created (Month and Number)

25. Select the "insert chart icon" and then in "Setup" tab of the Chart Editor (on far right), under "Chart type" change the chart type to a bar chart if it's not one already.

26. In the "Customize" tab of the Chart Editor (on far right), under "Chart and axis titles", add a title: "Timing of Historic Wildfire Ignition"

27. Change the subtitle of the Graph to "Colorado Wildfires, 2001-2019"

28. Center both titles

29. In the "Customize" tab of the Chart Editor (on far right), under "Series", scroll down and check the box next to "Data Labels"

30. In the upper right corner, click the 3 dots, and move the chart to its own sheet.

Wildfire Ignition Timing Questions

1. What percentage of the wildfires ignite in June and July? Speculate on what causes wildfires to begin this time of year.

2. What would cause wildfires to ignite in April or May instead of July?