



Colorado Wildfire - Student Worksheet

Part 1: How is wildfire risk changing in Colorado?

- How is wildfire risk changing in Colorado? Write at least three things in the What I Know section of the KWL Chart below.
- Watch <u>Colorado's Forests: Past, Present and Future</u>, a documentary about wildfire in our state.



• Write down your observations and questions about wildfires in the "What I Wonder" section of the KWL Chart.

KWL Chart	
What I <mark>K</mark> now	
What I Wonder	
What I Learned (Part 3)	











<u>Name:</u>

Part 2: Wildfire Data Analysis Stations

Jigsaw Station 1: Colorado Wildfire Fast Facts

Read highlights from the <u>Colorado Planning for Hazards—Wildfire</u> webpage (first three sections only).

1. What are the main causes of wildfires in Colorado?



2. What are the greatest risks that wildfires pose in Colorado?







<u>Name:</u> <u>Date:</u>

Jigsaw Station 2: How Wildfires Start

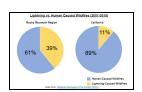
Read <u>Elements of Fire</u>, and analyze the Human vs. Lightning-Caused Fires Pie Charts (slide 13 of the lesson slides).

3. What are the three things needed for a wildfire to start (ignite)?



4. Wildfires can be ignited by both natural (e.g., lightning) and human (e.g., a lit cigarette dropped on the side of the road) events. Which of the three elements of the fire triangle (heat, fuel, oxygen) would lightning and a lit cigarette contribute to?

5. Look at the two pie charts showing lightning versus human caused wildfires in the Rocky Mountain Region and in California. Write three questions you have about the graphs.











Jigsaw Station 3: National Wildfire Trends

Identify patterns and trends in the Annual Wildfires and Acres Burned Graph (slide 10 of the <u>lesson slides</u>).

6. What does the graph show?



7. What is the independent variable? What are the units for the independent variable?

8. There are two dependent variables. What are they? What are the units for the dependent variables?

9. Is there a trend in the number of wildfires that occurred between 1990-2019? Is there a trend in the acres burned between 1990-2019?

10. Now, look at this <u>infographic</u>. The flames represent the same data as in the graph for acres burned. How many acres are predicted to burn in 2050?









Jigsaw Station 4: Location and Frequency of Wildfires in Colorado

Explore the Monthly Maps of Significant Weather Events "Wildfire" series to assess the frequency and location of wildfires in the state.

11. In Colorado, when does wildfire mainly occur (months/seasons)?



12. Do wildfires occur year-round in Colorado? Describe the seasonal pattern of wildfires in the state.

13. During times of high wildfire activity, where do wildfires mainly occur (geographic area/counties) in Colorado?









<u>Name:</u> <u>Date:</u>

Jigsaw Station 5: Wildfire Risk in Colorado

Read about <u>Colorado's Wildland-Urban Interface (WUI)</u>, and explore the map to see if your area has areas that are considered WUI.

14. In your own words, explain what the Wildland-Urban Interface is. Why would WUI be a concern for firefighters?



15. Look at the legend in the bottom left corner of the map. What are the units used in the Wildland-Urban Interface map?



16. What areas of the state have the most amounts of areas in the Wildland-Urban Interface?

17. Does your community have areas located in the Wildland-Urban Interface? If so, where?









<u>Name:</u> <u>Date:</u>

Jigsaw Station 6: Wildfire Safety

Read the National Weather Service <u>Wildfire Weather Safety</u> plan. Make sure to click on all tabs in the Wildfire Weather Safety plan website.

18. What is a "Red Flag Warning" and what should you do in response to it?



19. What is a "Fire Weather Watch" and what should you do in response to it?

20. In the event of a wildfire warning, what should you do to protect yourself and others with you?

21. As a kid, what is one thing you can do with your family to prepare for a wildfire?









Part 3: How can communities know more about and manage their wildfire risk?

Local Wildfire News Story

Prompt: Create a local news story in a format of your choice (see options below), that summarizes important information for people in your community to prepare for and understand wildfire risk.

Choose from the following format choices for the local wildfire news story:

- Newspaper article with one picture and one graph or map (one page)
- Radio story (2-3 minutes in length)
- Video newscast (2-3 minutes in length)

Use the outline below to collect information from the jigsaw activity to include in your news story.

Station 1: Colorado Wildfire Fast Facts	Causes of Wildfires Risks of Wildfire
Station 2: How Wildfires Start	Wildfire Ignition Triangle











Name: Date: Human vs. Lighting Caused Wildfires Station 3: Is the number of wildfires increasing? Is the size (acreage) of wildfires **National Wildfire** increasing? Trends Is the size of wildfires supposed to increase in the future? Station 4: Time of Year Wildfires Usually Occur in Colorado Location and Frequency of Wildfires in Colorado











Name: Date: Common Locations of Wildfires in Colorado Station 5: Wildland-Urban Interface Definition Wildfire Risk in Colorado Location of Wildland-Urban Interface Areas in Colorado and Local Community Station 6: Red Flag Warning vs. Fire Weather Watch Wildfire Safety How to Prepare for a Wildfire





