

Name _____

Period _____

Please go to my E-notes page labeled "Geology I" and click on "*Wildfire.*"

With your partner(s) please answer all of the questions below by going through each step on the website.

1. ES0201 Wildfire!

In the year 2000, how much did the U.S. spend on fighting forest fires? _____

2. ES0201 Fire Science and the Scientific Method

What are the steps involved in approaching a problem like wildfires scientifically?

_____, _____, _____,

_____, _____, _____

3. ES0201 Conditions That May Affect Fire Potential

What would be the scientific approach to managing firefighting resources efficiently?

4. ES0201 Relative Greenness

What does a high percentage relative greenness mean? _____

What does a low percentage relative greenness mean? _____

Rate the potential for a wildfire for each of the fire sites, using a scale of 1 to 5. Assign a 1 to an area you believe is not likely to burn; assign a 5 to an area you think is almost certain to burn. (You can assign the same rating to several sites if they all have the same potential for fire. Rate each site independently of the others rather than ordering them from lowest to highest risk).

A _____ B _____ C _____ D _____ E _____

5. E0201 Departure from Average Greenness

Examine the values at each site, and rate the risk of fire from 1 to 5 based on how much drier or greener than normal the site is. Use 1 to indicate a low potential for a fire; use 5 to indicate a high potential for fire.

A _____ B _____ C _____ D _____ E _____

6. ES0201 Live Moisture

What does a low live moisture level mean? _____

What does a high live moisture level mean? _____

Rate the risk of fire at each from 1 to 5 based on the live moisture level

A _____ B _____ C _____ D _____ E _____

7. ES0201 Temperature

Record your fire potential rating for each site based on its temperature.

A _____ B _____ C _____ D _____ E _____

8. ES0201 Relative Humidity

What is relative humidity? _____

Record your fire potential rating for each site based on its relative humidity.

A _____ B _____ C _____ D _____ E _____

9. ES0201 Wind Speeds

How can wind speed strengthen a wildfire? _____

Record your fire potential rating for each site based on its wind speed.

A _____ B _____ C _____ D _____ E _____

Add all the ratings for each site to come up with a total for each

Total A _____ Total D _____

Total B _____ Total E _____

Total C _____

Divide each total by six to come up with an average rating of the fire potential at each site

A Average Rating _____ D Average Rating _____

B Average Rating _____ E Average Rating _____

C Average Rating _____

According to your ratings, which of the five sites has the highest risk of fire? Which site has the lowest risk?

_____, _____

10. ES0201 Fire Danger

Describe how well or how poorly your fire potential ratings correlate with the national fire danger map.

11. ES0201 Improving the Model

Of the six conditions you rated, which do you think are the most important predictors of fire? Which do you think are least important? Describe your reasoning.

How could you modify the rating system to give more weight to the most important predictors?
