

**Environmental Changes  
Wildfire Preventers**

**Estimated Time:** 15-20 minutes

**Age range:** 3<sup>rd</sup> grade

**What you need:** Activity guide or separate sheet of paper, pencil

**Background Information:**

Northern Nevada is mostly made up of **rangelands**. These **rangelands** are made up of people and animals farming and grazing (eating) and doing their best to live. **Wildfires** are a major problem in rangelands; they can destroy the area and cause harm to both people and animals. Nationwide, more than 80% of all **wildfires** are caused by people. With this activity, you will learn how you can be a part of **wildfire prevention** (stopping) and **wildfire mitigation** (lessening).

**New Words**

**Rangeland:** open country used for grazing or hunting animals  
**Wildfire:** a large, destructive fire that spreads quickly over woodland or brush  
**Prevention:** the act of stopping a wildfire from occurring  
**Mitigation:** the act of lessening the impact of a wildfire

**Instructions:**

Read through the following scenarios carefully and pick the solution you think will work the best. Don't forget to explain your reasoning (why)!



**Scenario 1:**

You have a large plot (piece) of land you want to start a farm on that needs to be cleared. You notice that most of the land is covered with dry cheat grass, small dead trees and dying bushes. You know that if you leave the plants as they are they could become kindling (fire fuel) for a natural wildfire caused by lightning in the future.

**Debris Burning Solution:**

You collect all of the debris (dead and dying plants) in several small 4 feet by 4 feet piles. You call your local fire station to make sure all safety regulation for a controlled debris burn has been met. You make sure you have a water hose and shovel available. You double check that the area around the burn site has been cleared of all flammable material (stuff that will catch on fire easily). After the fire has been put out, you double check the fire has been drowned, stirred, and is no longer hot to the touch.

**Mulch Solution:**

You rent a wood chipper. A wood chipper is a machine that takes large plants and chops them into small pieces. You collect all of the debris in one large pile next to the wood chipper. You run the dead brush and branches through the wood chipper and collect the chipped pieces in a pile. You use the chips around your trees and plants as a mulch to help them retain (keep) water and to enrich the soil.

I predict the \_\_\_\_\_ solution will be the better solution because \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**Scenario 2:**

It's planting season on your farm, and it is time to refresh the soil in the field by ploughing it (turning over the topmost soil to bring fresh nutrients). You hook up your plough to the back of your tractor and start your job. As you plough, you notice your tractor's exhaust is letting off sparks every now and again. You know that if you let it continue, it could catch some brush on fire in the future and could cause a **wildfire**.

**Mitigation Solution:**

You decide to accept the "there's nothing I can do about it" attitude. You decide to stock up on fire extinguishers in order to help **mitigate** any future wildfires started by your faulty tractor.

**Prevention Solution:**

You check your tractor's muffler and notice the spark arrestor is damaged. You take note of the part you need, and order a new muffler with a brand new spark arrestor and have it delivered to your house. Once the part gets there, you switch out your old muffler for the new muffler, and run your tractor to see how it works. You notice there are no more sparks coming from the exhaust.

I predict the \_\_\_\_\_ solution will be the better solution because \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Reflection Questions:**

1. Has your understanding of the causes of wildfires changed after completing this activity? Why?

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2. How can you help prevent wildfires?

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