

Curriculum



Curriculum Contents

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Pulaski Story - Sample Lesson Plans - One Week

	Monday - Vocabulary Intro	Tuesday - Read Story	Wednesday - Letter Writing	Thursday - Vocabulary Review	Friday - Comprehension Quiz
Subject	Vocabulary	Reading	Writing	Vocabulary	Reading/Writing
Objective	Students will be able to use a dictionary to define selected vocabulary.	Students will be able to read Pulaski's story "Surrounded by Forest Fire" to/with the class.	Student will be able to write a letter to Mr. Pulaski with prompt.	Students will be able to identify vocabulary words in a matching format.	Students will take a short comprehension and vocabulary quiz.
Summary	Prereading vocabulary activity in which students use a dictionary to find the definitions of the vocabulary terms.	Teacher decides format for reading (teacher, students, or both read) in small groups or as a class.	Using writing prompt, students will write a letter to Pulaski. Students will be able to create a fictional communication with Pulaski.	Using the vocabulary matching worksheet, students will complete worksheet. Teacher then reviews vocabulary with class.	Teacher can judge student learning and comprehension with short quiz.
Time	approx. 30 - 45 min.	approx. 30 - 45 min.	approx. 30 - 45 min.	approx. 30 - 45 min.	approx. 30 - 45 min.
Level	4th Grade	4th Grade	4th Grade	4th Grade	4th Grade
Standards	4.L.A.1.8.2, 4.L.A.1.8.4	4.L.A.1.7.1, 4.L.A.1.8.3	4.L.A.3.5.1, 4.L.A.4.2.1	4.L.A.1.8.2	4.L.A.2.1.3

Pulaski Story - Sample Lesson Plans - Supplementary

Subject	Reading - Fact & Opinion	Language - Types of Sentences	Math - Step Calculation	Science/Reading /Language - Animal Activity
Objective	Students will be able to determine between facts and opinions.	Students will be able to label the sentences accordingly.	See Provided Lesson Plan	See Provided Lesson Plan
Summary	Students will use worksheet to decide whether statements are facts or opinions	Students will use worksheet to decide if sentences are declarative, interrogative, imperative, or exclamatory.	See Lesson Plan	See Lesson Plan
Time	approx. 30 - 45 min.	approx. 30 - 45 min.	approx. 30 - 45 min.	approx. 30 - 45 min.
Level	4th Grade	4th Grade	4th Grade	4th Grade
Standards	4.L.A.2.2.1	4.L.A.1.7.1	See Lesson Plan	See Lesson Plan

Surrounded by Forest Fires

My Most Exciting Experience as a Forest Ranger

By E.C. Pulaski

Winner of the First Prize in the Ranger Story Contest

During the summer of 1910 forest fires were everywhere in the Coeur d'Alene Mountains of northern Idaho. For weeks there had been no rain and the woods were drier than I had ever seen them. The intense heat of the sun, combined with strong winds which sprang up during the day, served to scatter the fires in all directions. Crews of several hundred men were working twenty-four hours a day throughout the mountains, endeavoring to hold back the fires.

The Supervisor of the Coeur d'Alene National Forest, whose headquarters were in Wallace, Idaho, had detailed me to go from one fire camp to another to direct the men in the battle against the flames, and to see that the packers properly distributed supplies. Although we worked day and night and did everything that could be done to control the fires, little headway was made because of the dryness of the forest and those strong winds.

On August 20 a terrific hurricane broke over the mountains. It picked up the fires and carried them for miles. The wind was so strong that it almost lifted men out of their saddles, and the canyons seemed to act as chimneys, through which the wind and fires swept with the roar of a thousand freight trains. The smoke and heat became so intense that it was difficult to breathe. The men who were packing in supplies refused to go through to their destinations, dumped their loads, and fled back to Wallace. Thousands of dollars' worth of blankets and supplies were thus lost.

That afternoon the wind swept the mountains in circles and joined the fires. The whole world seemed to us men back in those mountains to be aflame. Many thought that it really was the end of the world. Under such conditions, it would have been worse than foolhardy to attempt to fight the fires. It was a case of saving our lives. I got on my horse and went where I could, gathering men. Most of them were unfamiliar with the country, and I knew that if they ever got out they would have to be led out; but those that I got together were so panic-stricken it was very difficult to make them understand what I wanted them to do. Added to that, it had become very dark, although it was but little after mid-day.

I finally collected forty-five men. My voice was almost gone from trying to call above the noise of the fire and wind, but I finally succeeded in making them understand that if they would seize blankets from the camp stocks and do just as I told them, there was a chance of our saving our lives; otherwise they would be burned to death. Trees were falling all about us under the strain of the fires and heavy winds, and it was almost impossible to see through the smoky darkness. Had it not been for my familiarity with the mountain trails, we would never have come out alive, for we were completely surrounded by raging, whipping fire.

My one hope was to reach an old mine tunnel which I knew to be not far from us. We raced for it. On the way one man was killed by a falling tree. We reached the mine just in time, for we were hardly in when the fire swept over our trail. I ordered the men to lie face down upon the ground of the tunnel and not dare to sit up unless they wanted to suffocate, for the tunnel was filling with fire gas and smoke. One man tried to make a rush outside, which would have meant certain death. I drew my revolver and said, "The next man who tries to leave the tunnel I will shoot." I did not have to use my gun.

Two horses were in the tunnel with us. The horse I was riding I had given to an old man who could not keep up with us in the race to the tunnel. I often wonder what happened to the bear that came down that fiery trail with us and insisted in getting in our way. But at the time I gave no thought to bear or horses. Outside the tunnel the canyon was a raging furnace. The mine timbers caught fire, so I stood at the entrance and hung wet blankets over the opening, trying to keep the flames back by filling my hat with water, which fortunately was in the mine, and throwing it on the burning timbers.

The men were in a panic of fear, some crying, some praying. Many of them soon became unconscious from the terrible heat, smoke, and fire gas. The wet blankets actually caught fire and I had to replace them with others soaked in water. But I, too, finally sank down unconscious. I do not know how long I was in this condition, but it must have been for hours. I remember hearing a man say, "Come outside, boys, the boss is dead." I replied, "Like hell he is." I raised myself up and felt fresh air circulating through the mine. The men were becoming conscious. It was 5 o'clock in the morning.

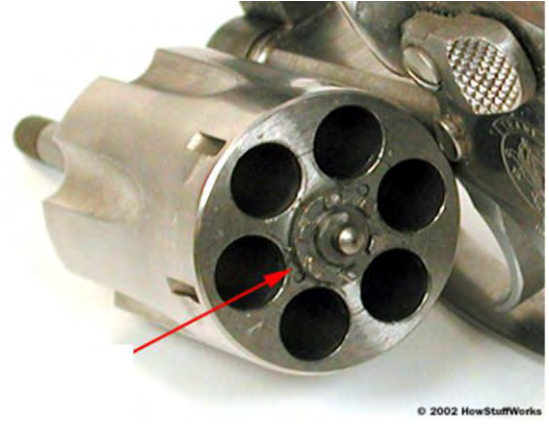
We tried to stand up, but our legs refused to hold us; so we dragged ourselves outside to the creek to ease our parched throats and lips. Our disappointment was terrible when we found the stream filled with ashes and the water too warm to drink. We counted our number. Five were missing. Some of the men went back and tried to awaken them, but they were dead. As the air outside became clearer, we gained strength, and finally were able to stagger to our feet and start toward Wallace. We had to make our way over burning logs and through smoking debris. When walking failed us, we crawled on hands and knees.

How we got down I hardly know. We were in a terrible condition, all of us hurt or burned. I was blind and my hands were burned from trying to keep the fire out of the mine. Our shoes were burned off our feet and our clothing was in parched rags. We were covered with mud and ashes. Some time during the morning a rescue party met us. These men had had a hard time themselves and were in a very poor condition to help us. Later, as we dragged our way down through Placer Creek, we were met by some women from Wallace. They had hot coffee and whiskey, and although we appreciated the kindness of those brave women, we could take nothing but cold water.

We finally reached Wallace and were put in the different hospitals. Those who had died were later brought out on pack horses. Part of Wallace had burned in that same fire, so when my injuries were dressed I insisted on going to my home, to make sure that my wife and little daughter were all right. I got a man to lead me, for the world was black to my eyes, but when I found my home and family safe, they sent me back to the hospital, where I stayed for nearly two months with blindness and pneumonia. My experience left me with poor eyes, weak lungs, and throat; but, thank God, I am not now blind.

Name _____

Vocabulary for “Surrounded by Forest Fires”



- **Intense** — Existing or occurring in a high or extreme degree.
- **Hurricane** — A storm of the most intensity.
- **Seize** — To take hold of suddenly; grasp.
- **Familiarity** — Thorough knowledge or mastery of a thing, subject, etc.
- **Raging** — Fury or violence of wind, waves, fire, etc.
- **Suffocate** — To kill by preventing the access of air to the blood through the lungs.
- **Revolver** — A pistol having a revolving cylinder.
- **Furnace** — A place characterized by intense heat.
- **Parched** — To make extremely dry, especially by exposure to heat.
- **Debris** — The remains of anything broken down or destroyed.

Name _____

Vocabulary Matching

Match the word to its definition and write the number on the line.

- | | |
|-----------------|--|
| ___ Intense | 1. A place characterized by intense heat; a stove. |
| ___ Hurricane | 2. To know something very well; mastery. |
| ___ Seize | 3. To die from lack of air. |
| ___ Familiarity | 4. To make extremely dry from heat. |
| ___ Raging | 5. Occurring in a high or extreme degree. |
| ___ Suffocate | 6. To take hold of suddenly; grasp. |
| ___ Revolver | 7. A very intense storm. |
| ___ Furnace | 8. Fury or violence of fire. |
| ___ Parched | 9. The remains of anything destroyed. |
| ___ Debris | 10. A pistol or gun with a revolving cylinder. |

Name _____

Sentence Types



In this photo taken around 1910, a group of men works to control a fire in Mt. Hood National Forest. Photo courtesy of U.S. Forest Service.

For each sentence, tell if it is declarative, interrogative, imperative, or exclamatory.

1. _____ "Come outside, boys, the boss is dead."
2. _____ Can we offer you some coffee?
3. _____ On the way one man was killed by a falling tree.
4. _____ Fire, everybody run!
5. _____ I raised myself up and felt fresh air circulating through the mine.
6. _____ How many men died in the tunnel?
7. _____ Follow me to safety.
8. _____ Did you see that bear running beside me?
9. _____ That was the biggest fire I have ever seen!
10. _____ The horse I was riding I had given to an old man who could not keep up.

Name _____

Fact or Opinion



Directions: Label each sentence F (fact) or O (opinion).

1. _____ The Supervisor of the Coeur d'Alene National Forest's office was located in Wallace, Idaho.
2. _____ The forest fires of 1910 were very destructive.
3. _____ Ed Pulaski was a very brave man.
4. _____ Pulaski collected forty-five men to try to escape the fire.
5. _____ The women from Wallace were very kind.
6. _____ The men regained consciousness around 5 o'clock in the morning.
7. _____ Five men died in the tunnel.
8. _____ The coffee the women had was extremely hot.
9. _____ Outside the tunnel the canyon was a raging furnace.
10. _____ My experience left me with poor eyes, weak lungs, and throat.

August 23, 1910
Mr. Edward Crocket Pulaski
165 Burke Canyon Rd.
Wallace, ID 83873

Dear Mr. Pulaski,

My name is _____. I am writing to you today to let you know

Sincerely yours,

_____ Elementary

TITLE: Steps Calculation

AUTHOR: Jim See

GRADE LEVEL/SUBJECT: 3-5, math

OVERVIEW: This activity allows students to practice their calculating skills in a classroom setting. Students could work in cooperative groups and are in competition with each other.

PURPOSE: The purpose of this lesson is to give students an opportunity to practice calculation skills in a real life situation.

OBJECTIVES; The students will be able to:

1. Use calculation to determine the number of steps required for them to reach the tunnel.
2. Determine the length of their stride.

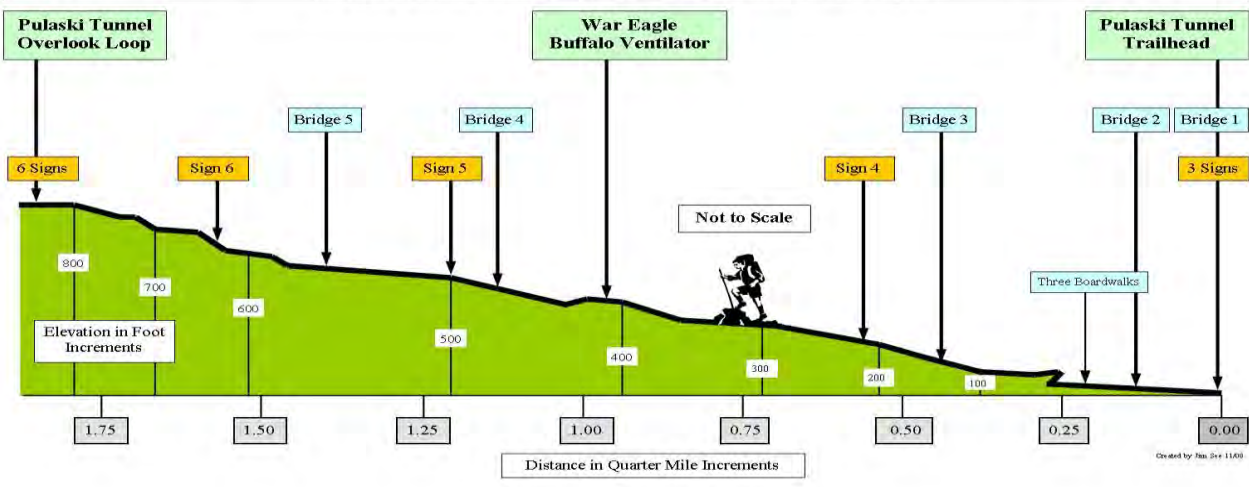
RESOURCES/MATERIALS: A tape measure or yard stick and the worksheet.



Pulaski Tunnel Trail Elevation



The Pulaski Tunnel Trail is a moderately difficult trail, rising 800 feet in nearly two miles. It follows the West Fork of Placer Creek. There are six vigorous uphill grades along the trail including one switchback. Three of the grades are located in the last one-third mile. Most of the trail is native surface, with several rocky areas. Sturdy footwear is recommended. The hike, in both directions, generally takes two to three hours to complete.



Stepping into History

How many steps does it take to get to the Pulaski Tunnel?

A. Measure your **stride in inches**.

1. You will need a tape measure or a yard stick.
2. From a starting point at the tip of your toe, walk ten natural steps counting both feet.
3. Mark the end point of your walk at the tip of your toe on the last step.
4. Measure the distance in inches from the starting point to the end point.
5. Divide the total inches by ten. This is a measure of your stride.

Your stride is the distance you travel in one step. *Record Stride* _____

B. Find the **distance in inches** to the Pulaski Tunnel.

1. The distance from the parking lot to the tunnel loop is 2 miles.
2. Find the number of feet in one mile.
3. Multiply the number of feet in one mile times two.
4. Calculate the number of inches in two miles to get the number of inches of the trail.

Multiply the number of feet in two miles times 12. *Record Inches* _____

C. Find the number of steps you need to take to reach the Pulaski Tunnel.

1. Find the length of your stride in inches from A above.
 2. Find the number of inches of the distance to the tunnel from B above.
 3. Divide the distance to tunnel by the inches in your stride. (B divided by A)
- This is the number of steps you will need to take to get to the tunnel.

Record Steps _____

Mammals of the Pulaski Tunnel Trail Activity

(Mammals of the West Fork of Placer Creek, Mammals of Idaho, Mammals of the Northwest)

Directions: Choose a mammal from the list below, research the characteristics of the mammal and its

habitat. Prepare a report on your mammal choice and create a display or diorama.

Consider which of the mammals from the following list would not be living near the West Fork of Placer Creek. The mammal list has been taken from:

The Idaho Fish and Game Website

<http://fishandgame.idaho.gov/cms/wildlife/nongame/mammals.cfm>

Mammals of Idaho

Mammals are a diverse group of vertebrates (animals with backbones), varying widely in size, behavior, and ecological adaptations for their respective niches. The two most fundamental characteristics of mammals are hair and skin glands, including mammary glands that secrete milk, and the sweat and sebaceous (oil and scent) glands. Mammals (and birds) are endothermic vertebrates whose internal body temperature is maintained "from within" (endo-) by the burning of food within the body. Endothermic mammals are further divided into those that maintain a constant internal body temperature (homeothermic) and those whose internal body temperature can vary (heterothermic) such as bats and ground squirrels that hibernate. Another unique feature of mammals is that they have a secondary palate that separates the nasal cavity from the mouth which allows breathing to occur at the same time as feeding.

Early mammals evolved from reptiles about 200 million years ago. There are only about 4,000 species of mammals in the world, far fewer than birds or reptiles, but because of their great competitive abilities, intelligence, and predatory skills, mammals are regarded as the dominant group of vertebrates.

There are currently 474 species of North American mammals north of Mexico, and 113 mammal species in Idaho. These 113 species are broken down into groups that include opossums, shrews and moles, bats, rabbits, rodents, carnivores, and ungulates. Because of the wide diversity of habitats found in Idaho from the cool, moist forests of the Panhandle to the hot, dry sagebrush of the Snake River Plain and from Hells Canyon to the Tetons, we have a diversity of mammal species in Idaho. However, only one species of mammal is found in Idaho and nowhere else, the [Idaho ground squirrel](#).

Mammal Species

Listed by common name, followed by the scientific name, followed by the regulatory status as follows:

*G - Game species whose harvest is regulated by the Idaho Dept. of Fish & Game through bag limits and seasons.

*L - Species not under control of Idaho Dept. of Fish & Game but instead fall under the purview of the Idaho legislature.

*P - Protected Non-game species for which it is illegal to collect, harm, or otherwise remove from its natural habitat except as provided under Idaho Code or Commission Regulations.

*Exotic - Species that humans intentionally or unintentionally introduced into an area outside of a species' natural range.

Moles and Shrews

Masked Shrew
 Vagrant Shrew
 Dusky Shrew
 Dwarf Shrew
 Water Shrew
 Merriam's Shrew
 Pygmy Shrew
 Coast Mole

Bats

Little Brown Bat *P
 Yuma Myotis *P
 Long-eared Myotis *P
 Fringed Myotis *P
 Long-legged Myotis *P
 California Myotis *P
 Western Sm.-footed Myotis *P
 Silver-haired Bat *P
 Western Pipistrelle *P
 Big Brown Bat *P
 Hoary Bat) *P
 Spotted Bat *P
 Townsend's Big-eared Bat *P
 Pallid Bat *P

Rodents and Squirrels

Least Chipmunk *P
 Yellow-pine Chipmunk *P
 Cliff Chipmunk *P
 Red-tailed Chipmunk *P
 Uinta Chipmunk *P
 Yellow-bellied Marmot
 Hoary Marmot
 White-tailed Antelope Squirrel
 Piute Ground Squirrel
 subspecies artemisiae in
 Eastern Idaho is protected *P
 Merriam's Ground Squirrel *P
 Northern Idaho Ground
 Squirrel *P
 Southern Idaho Ground
 Squirrel *P
 Uinta Ground Squirrel
 Belding's Ground Squirrel
 Columbian Ground Squirrel
 Rock Squirrel *P
 Golden-mantled Ground
 Squirrel *P
 Wyoming Ground Squirrel
 subspecies nevadensis in SW

Idaho is protected *P
 Red Squirrel *P
 Eastern Gray Squirrel *Exotic
 Eastern Fox Squirrel *Exotic
 Northern Flying Squirrel *P

Pocket Gophers

Townsend's Pocket Gopher
 Northern Pocket Gopher
 Idaho Pocket Gopher

Pocket Mice + Kangaroo Rats

Little Pocket Mouse *P
 Great Basin Pocket Mouse
 Dark Kangaroo Mouse *P
 Ord's Kangaroo Rat
 Chisel-toothed Kangaroo Rat

Beaver

American Beaver *G

Mice, Rats, and Voles

Western Harvest Mouse
 Deer Mouse
 Canyon Mouse
 Pinon Mouse
 Northern Grasshopper Mouse
 Desert Woodrat
 Bushy-tailed Woodrat
 Southern Red-backed Vole
 Heather Vole
 Meadow Vole
 Montane Vole
 Long-tailed Vole
 Water Vole
 Sagebrush Vole
 Muskrat *G
 Northern Bog Lemming *P
 Norway Rat *Exotic
 House Mouse *Exotic
 Western Jumping Mouse

Opossum

Virginia Opossum *Exotic

Others

Common Porcupine

Pikas, Rabbits, and Hares

American Pika *P
 Mountain Cottontail *G
 Snowshoe Hare *G

White-tailed Jackrabbit *L
 Black-tailed Jackrabbit *L
 Pygmy Rabbit *G

Carnivores

Coyote *L
 Gray Wolf *P
 Red Fox *G
 Kit Fox *P
 Black Bear *G
 Grizzly (Brown) Bear *P
 Common Raccoon *G
 American Marten *G
 Fisher
 Ermine *L
 Long-tailed Weasel *L
 Mink *G
 North American Wolverine *P
 American Badger *G
 Western Spotted Skunk *L
 Striped Skunk *L
 Northern River Otter *G
 Mountain Lion *G
 Lynx *P
 Bobcat *G

Ungulates

Elk *G
 Mule Deer *G
 White-tailed Deer *G
 Moose *G
 Woodland Caribou *P
 Pronghorn *G
 Mountain Goat *G
 California Bighorn Sheep *G
 Rocky Mountain Bighorn
 Sheep *G
 Feral Horse *P