

(your name here)

Junior Ranger Booklet





What do you need to do to become a

Junior Ranger?

Complete two of the four tasks below:

1.	Finish	the	required	number	of	activity	/
	pages	in th	nis book:				

4-6 years old: 4 pages

7-11 years old: 8 pages

12 and up: all pages

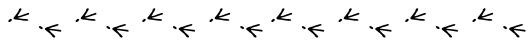
- 2. Pick up one bag of trash! Have an adult initial if you did:
- 3. Go for a hike! Where did you go:
- 4. Do a ranger activity! What did you do?

When you've finished, you can turn in your book at a ranger station or fill out and mail in the postcard on the back page to receive your Junior Ranger badge!

Help clean up the forest!

Ever get somewhere and realize you left something behind? Oops! We all forget things sometimes, and trash is no exception.

Ask someone to count to 100 while you try to find as many pieces of trash as you can!



How many pieces did you find?

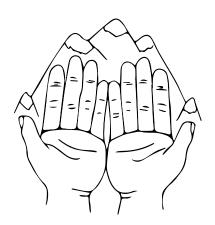
Draw the most interesting piece of trash you found below:

Don't forget to put your trash in the trash can!

(This counts towards your trash pick-up on the first page.)

Get to know your water!

If you live in California, you might get your water from the Sierra Nevada mountains! When rain or snow lands in the mountains, it drains into lakes and rivers and all the way into California's Central Valley! Do this activity to see how water flows:



Cup your hands together with your fingers pointing up: they are your mountains, your palms are the Central Valley. Now have someone spray or drizzle water on your fingertips. Watch what happens, then answer the questions below!

Did any water flow into your palms?				
Did any water drip between your fingers?				
Did any water get trapped in lakes where your fingers				
meet your palm?				

Water can flow into the Central Valley, go underground into what we call aquifers, or create mountain lakes that we can swim and play in! It's all connected, so make sure you do your part to keep it clean—the next time you see this water might be in your sink at home!

Be a Social Scientist!

Social Scientists help us to understand who is using the forest and how so that we can make better decisions to take care of our forest and provide for our visitors!

Take 5-10 minutes to see how people are using the forest around you today! Keep a tally of all the people you see doing the following activities:

Camping	Boating	
Hiking	Relaxing	
Cycling	Swimming	
Fishing	Playing	

How many people did you see?
Circle your most popular activity!
What could improve that part of the forest for people
doing that activity?

Draw a nature journal!

Nature journaling is when we use art to pay closer attention to the world around us. Find a comfy place to sit in the forest, then draw or write creatively about each of the following:

Something you can see	Something you can smell
Something you can hear	Something you can touch

Learn a different language!

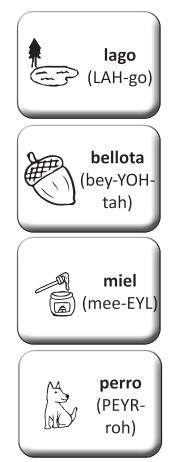
Learning different languages is like having different glasses to see the world through! Me-Wuk is the language of the Me-Wuk people who have called this forest home for thousands of years. Spanish is a language spoken by many of our forest visitors. Match the Me-Wuk word and its definition on the left to the Spanish word with its picture on the right.



pol:uku (POHL-oo-koo) a body of water

watuk:a (wah-TOOK-ah) an oak's seed

chuku: (choo-KOO) animal that barks

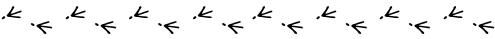


Don't forget to share your new words with your friends!

Get to know the trees!

Conifers—trees that have leaves shaped like needles or scales—can be hard to tell apart! But take a closer look and you'll see that they're all unique, just like you and me!

Draw a line from the tree's name and description to the needles that match! Then try matching them in real life and put a star next to each tree you can find!



Incense Cedar

Flat, scaly needles

Sugar Pine 5 needles

in a bundle, about 4 inches long

Douglas Fir Flat needles

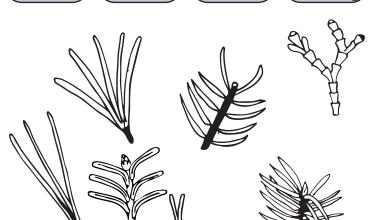
Flat needles that grow tightly packed on twigs

Lodgepole Pine

2 needles in a bundle, about 2.5 inches long

Red Fir

4-sided needles that grow up at an angle from twigs



White Fir

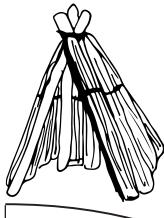
Flat needles that grow spread out on twigs



3 needles in a bundle, 5-10 Sinches long

Do you wonder how to tell Ponderosa and Jeffrey Pines apart? **Smell their bark!** Jeffrey Pines smell like butterscotch!

Build a house!

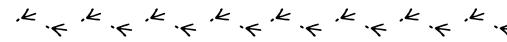


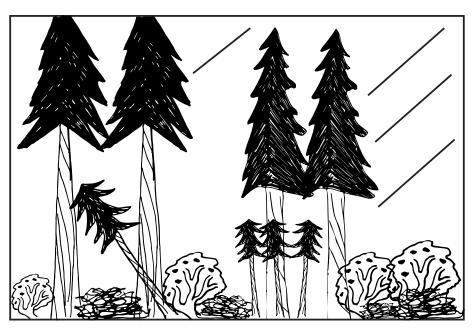
There are many kinds of houses in the world. One kind of house that the Me-Wuk people have traditionally built is an **umacha** (OO-mah-CHAH). It is made in a cone shape with sturdy wood poles covered by layers of cedar bark and tied together with grape vine. Color the umacha below, then ask an adult to help you cut it out. Glue or tape the edge together to make your own umacha.

Don't forget to show it off when you turn in your book!

See the difference fire can make...

The Me-Wuk people have long used fire as a tool to care for the forest. Traditionally, they lit fires around black oak trees to get rid of bugs in their acorns so that they would have a good harvest the next year. The Forest Service continues to use this technique because regular, low intensity fires help prevent high intensity fires. By burning the debris on the ground, fires provide nutrients and more space for the plants left behind to grow bigger and stronger, as well as removing competition for our limited water supply.

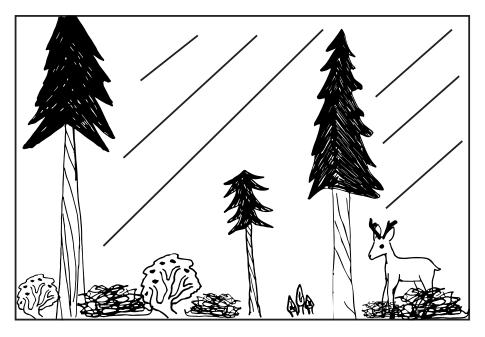




A forest without regular fires

...then, circle the difference!

On these two pages are two different pictures of a forest—one has had regular, low intensity fires to keep it healthy, the other has not had a fire in many years. Circle the differences between the two pictures on this page. What do you think is a reason for one of these differences?



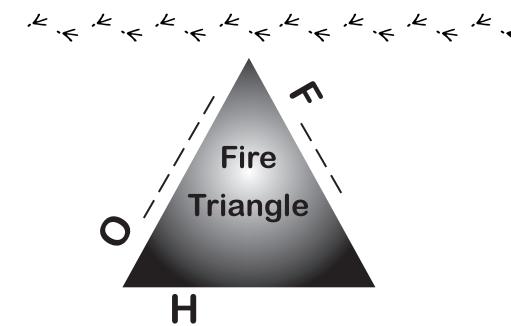
A forest with regular, low intensity fires

Be a Fuels Technician!

Fire is an important part of many forests, including our own! **Fuels Technicians** study fire in nature to learn how it behaves under different conditions and in different fuels—like grasses, shrubs, or trees. This can help us predict future fires and manage them to help nature while trying to keep people safe.

What are two ways	a fire	might	start?
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A fire needs three things to start: oxygen, fuel, and heat. We call this the **Fire Triangle**. Fill in the blanks on the Fire Triangle below.

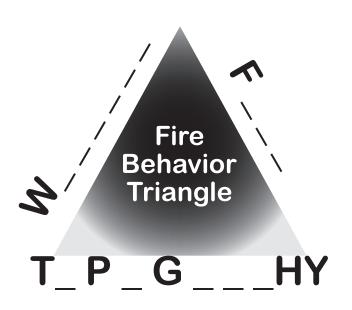


Another fire triangle helps Fuels Technicians determine what a fire might do after it starts. This is called the Fire Behavior Triangle. Guess what goes on this triangle based on these clues:

W: this is the word for what it's like outside: cold or hot, rainy or sunny, windy or calm

F: this word means all the types of plants that a fire can burn, like grasses, shrubs, or trees

T: this word means the shape of the land. On some maps, it is squiggly lines that show hills



Go on a scavenger hunt!

The forest is full of wildlife, plants, and people! Look for them and the clues they leave behind. See how many you can find, or try to find everything in one row or column— or diagonally!

a pine cone	a dragonfly a feather		animal scat	
animal tracks	a piece of trash	a bird - or its song!	a snake or lizard	
00	- pick it up!	SUITE:	nizaru	
a nest	a splashing fish	a leaf	a mosquito	
	and the second s			
a bone	a trail sign	an osprey or bald eagle	a cool rock	
	SLAKE	bald eagle		

To receive your Junior Ranger badge in the mail, remove this page from the booklet, write your address clearly in the space below, then tell us one of the best parts of your visit to the forest! Stamp this page, then place it in the mail!

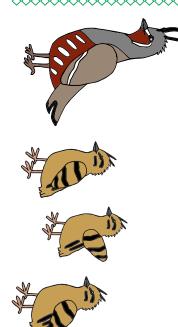


Place your stamp here!

Junior Ranger Program

1 Pinecrest Lake Road

Pinecrest, CA 95364



Junior Kanger Certificate Stanislaus National Forest

As a Junior Forest Ranger To care for the Stanislaus l give my pledge

And for all its wildlife living For all its water flowing

For all its plants growing

And all of nature:

And by teaching others By conserving water, By picking up trash,

To do the same.

Awarded to:



Your Name Here