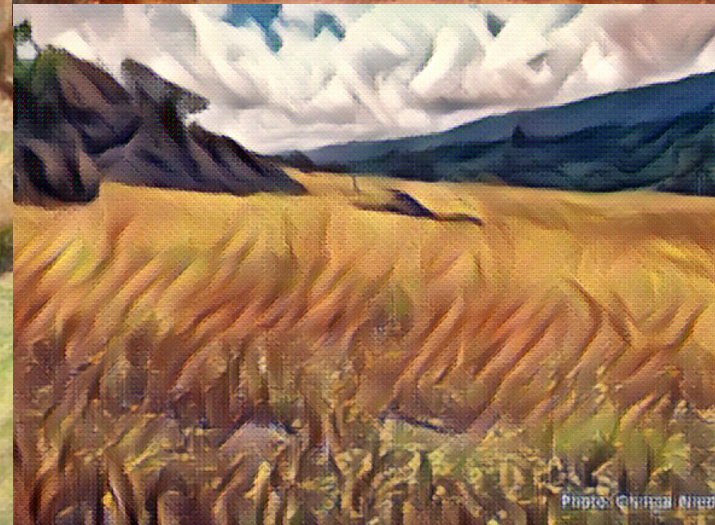
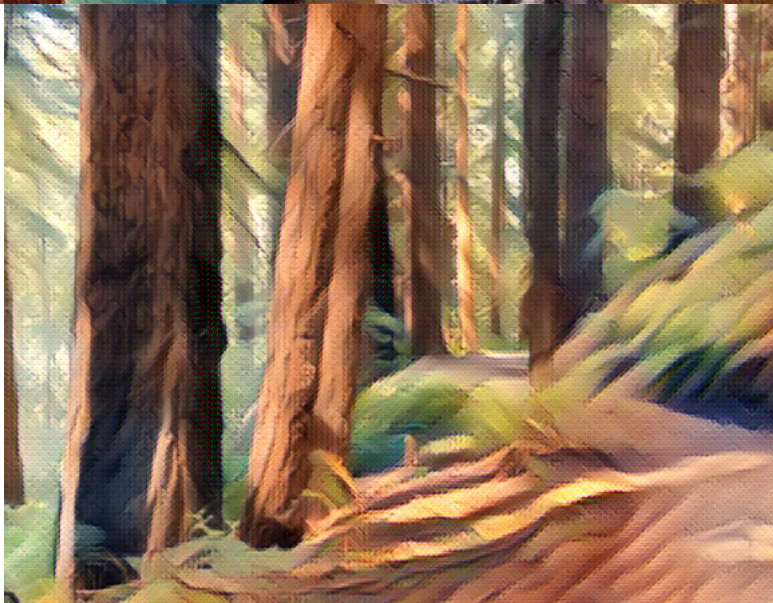


JUNIOR RANGER CHALLENGE





JUNIOR RANGER CHALLENGE

Welcome, future Junior Rangers, to San Mateo County Parks! We are so excited for you and your family to explore San Mateo County's wealth of natural, cultural, and recreational resources. Our friend Scout the Scrub Jay will join you along the way to introduce fun facts and some activities! As Scout would agree, our county offers one of the most diverse group of parks in California:

Hi all! I'm Scout! Let's look at this map!

To the South, you can explore the tallest trees in the world in our Redwood forests.

To the North, you'll get 360 degree views of the Bay Area from atop San Bruno Mountain.

To the East and West, you can explore intertidal habitats, with all sorts of cool aquatic life!

In the middle, there are vast parks of oak woodlands and grasslands.





INTRODUCTION

To become a Junior Ranger, you will have to **explore at least one park** and **complete some of the activities** found on the San Mateo Junior Ranger website. Here's how to do this:

STEP #1: You need to complete this section's introductory activities: **What does it mean to be a Junior Ranger, Park Rules, Be Safe, and Intro to Habitats and Ecosystems**. All are great preparation to get you ready to explore, so you need to do all four!

STEP #2: After you complete those, pick the kinds of places you want to go to! You have to **pick at least 2**. Here are the kinds of places, what we call **groups**:

- Historic Sites
- Riparian
- Scrub/Chaparral
- Redwood
- Intertidal
- Oak Woodland
- Grassland

STEP #3: Each group has 3 activities. Some are more difficult than others, but try the best you can to complete all 3 activities per group! There is an answer key on the website for the tricky ones! Email kewright@smcgov.org for questions. You may do a different activity from another group if one is too difficult. Use the Checklist at the back of the booklet to keep track of what you've completed!



At the end of this section is the **Table of Contents**, with which parks fall under which group! You will see that some parks fall under more than one group, so pick where you are going wisely! The **Table of Contents** also lists the activities you will do.

STEP #4: If you complete:

2 groups for a total of 10 activities: you get the Junior Ranger badge and certificate

3 groups for a total of 13 activities: Junior Ranger badge, certificate, and notebook

4 groups for a total of 16 activities: Junior Ranger badge, certificate, notebook, and water bottle!

STEP #5: Take a picture of yourself working on an activity at a park and email it with proof of your completed activities and your checklist to kewright@smcgov.org to receive your prizes! Make sure you say the Junior Ranger Pledge too!





INTRODUCTION

WHAT DOES IT MEAN TO BE A JUNIOR RANGER?

Look at
the Answer Key!

A Junior Ranger can be anyone, of any age, from any place! However, Junior Rangers all have shared traits to show their love of the parks. **Use the word search to find what it means to be a Junior Ranger!**

RESPECTFUL	HONEST
ADVENTUROUS	INTELLIGENT
ARTISTIC	KNOWLEDGEABLE
CARING	OPTIMISTIC
CREATIVE	PASSIONATE
ENERGETIC	THOUGHTFUL
FRIENDLY	WATCHFUL
HELPFUL	SCIENTIST
HIKER	HISTORIAN

Y	C	B	E	S	L	C	C	E	R	Y	H	E	E	G	H	M	D	W	L	E	I
E	N	C	M	Q	L	U	T	C	C	C	R	E	A	T	I	V	E	T	A	A	I
H	X	Y	W	W	K	Y	F	W	H	I	K	E	R	V	P	W	X	D	S	D	Q
M	Q	X	E	C	I	N	C	T	J	T	T	W	P	I	S	N	H	W	L	V	L
K	G	Y	A	P	G	C	O	A	C	T	Q	S	H	D	Y	T	R	L	U	E	U
S	Z	I	D	V	K	M	X	W	R	E	S	G	I	Z	U	E	F	D	F	N	F
A	R	T	I	S	T	I	C	S	L	I	P	I	F	M	E	E	G	N	T	T	H
R	X	C	I	T	E	G	R	E	N	E	N	S	T	G	I	F	A	M	H	U	C
G	I	R	Q	R	G	M	T	T	B	I	D	G	E	N	K	T	E	S	G	R	T
U	T	N	E	G	I	L	L	E	T	N	I	G	L	R	E	C	P	G	U	O	A
P	A	S	S	I	O	N	A	T	E	T	T	F	E	F	S	I	B	O	O	U	W
U	O	H	I	S	T	O	R	I	A	N	S	I	H	A	Y	L	C	B	H	S	Z
K	N	K	O	D	H	Z	A	C	Z	P	W	S	P	L	B	T	Q	S	T	J	W
T	S	E	N	O	H	I	P	K	T	Q	I	S	N	Q	E	L	S	X	F	C	H
H	E	L	P	F	U	L	J	W	W	S	V	P	V	F	R	I	E	N	D	L	Y



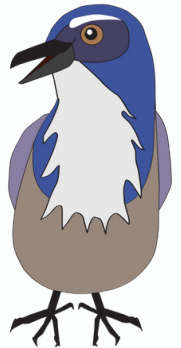
INTRODUCTION

PARK RULES

Look at the Answer Key!

Like with all things, it is important to treat your parks with kindness and respect. As a Junior Ranger, it is your job to understand the rules and make sure your group does the same! We follow the ideas of **Leave No Trace**:

1. Plan ahead and prepare
2. Travel and camp on durable surfaces
3. Dispose of waste properly
4. Leave what you find
5. Minimize campfire impacts
6. Respect wildlife
7. Be considerate of other visitors.



Unscramble these phrases to learn the San Mateo County Parks rules.

Use the bolded letters to find out the hidden sentence!

SAYT ON IRTAL

TYAS LOESC TO AN UDALT

DO NOT APPARHOC WILEFDLI

AHEV CARIPMFSE IN EFRI SPTI LNYO

DO NOT CIKP FLISOEWR OR STLNAP

FINSHIG AND HINUNTG ARE NOT PERTIDTEM

DO NOT ITLTER, PUT HTASR IN GABEARG ISNB

DO NOT DEFE FLEIIDWL

J _ _ _ _ R _ _ _ _ A _ _ _ _ K S _ _ _ !



INTRODUCTION

BE SAFE

You're almost ready to head out and become a proper Junior Ranger! However, there are some plants and wildlife that you want to avoid to have the best time possible and stay safe. Ask an adult to read the following two pages aloud while you listen carefully or read on your own. Answer the question at the end and you'll be good to go!

Poison oak has a grouping of three leaves and can grow as a shrub or as a vine scaling trees. It ranges in color from green, to yellow, to red. Its oil causes an irritating rash that can last for days. If you come into contact with poison oak, wash your skin with soap and warm water as soon as possible.



Stinging Nettle has bright green leaves with hollow hairs that brush off on you and sting, causing a day-long rash. It grows in moist, shady places. Don't touch the affected area and immediately wash with soap and water.

Ticks are parasites that feed on the blood of their host. Ticks climb vegetation and attach to any animal- humans included!- that brushes the plant. A small percentage of deer ticks carry Lyme disease. Be sure to check for and remove any ticks after spending time outdoors. You can remove ticks by sliding a credit card under them.





INTRODUCTION

BE SAFE

Yellowjackets are several different species of wasps that defend themselves by delivering a painful sting which may cause swelling and itching. If you are stung, remove the stinger, if left in your skin, by scraping from the side with your fingernail. Apply cold water or ice in a wet cloth. If allergic to yellow jacket venom seek medical attention immediately.



Rattlesnakes live within our parks, but often hide away from us- they need their space, so give them plenty if you see one! Look where you are stepping, and never reach under rocks or into openings.

These organisms can cause problems, but it can be easy to be safe and avoid them!

What is something you can do to stay safe?



INTRODUCTION

HABITATS AND ECOSYSTEMS

For the rest of this booklet, we will discuss both habitats and ecosystems, and the wide variety of them we have in San Mateo County Parks. While a habitat and an ecosystem are very similar, they are not quite the same thing:

*A **habitat** is the kind of home in which an organism lives. An **ecosystem** is a large area with organisms interacting with each other and their environment.*

Think of a habitat as a specific address, while an ecosystem is a neighborhood! We have 6 ecosystems in San Mateo County Parks:



SCRUB/CHAPARRAL

mostly hardy shrubs capable of handling our dry summers.



GRASSLAND

mostly grasses, wildflowers, and relatives of both.



RIPARIAN

a river or stream and the areas directly around it.



REDWOOD

thick forest of redwood trees with little underbrush. Consistent moisture from fog.



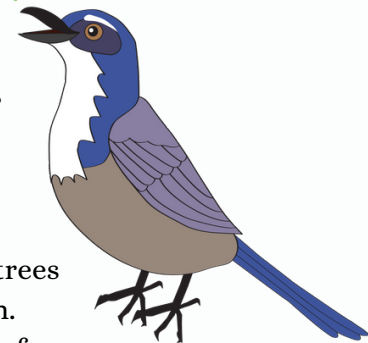
INTERTIDAL

a beach area that changes with the tides that may have pitted rocks which keep the water through the day, called tidepools.



OAK WOODLAND

not as thick as a forest, but not as open as a grassland. There are a variety of trees throughout but most are oaks.





INTRODUCTION

HABITATS AND ECOSYSTEMS

Look at the Answer Key!

CHALLENGE: Match the organism to the ecosystem it lives in!



Banana slug:

I live on a cool, dark, moist forest floor. I often move slowly underneath plants like ferns and redwood sorrel.



Anemone:

While I live in saltwater, I would not survive if you just plopped me anywhere in the ocean! I need a little crevice with shallow waters that change with the tide.



Western fence lizard:

I can live all over, but I like habitats with mostly low-growing plants. That way I can soak up the sun and eat all the insects found on the shrubs.

Grassland

Scrub/Chaparral

Redwood

Intertidal

Oak woodland

Riparian



Coast live oak:

As a large oak tree, I like to have relatively open spaces to get plenty of sun and space. I often live in hilly areas with a couple seasonal streams and with several other trees just like me.



Steelhead trout:

I need cool freshwater streams to feed and lay my eggs.



Checkerspot butterfly:

My habitat has to have many flowers to feed me and eventually my baby caterpillars! I prefer the flowers that grow in wide open spaces.



TABLE OF CONTENTS

ACTIVITY LIST

Now that you know the ecosystems of San Mateo County Parks, pick some and go explore! Listed below are the groups, the parks that have them, the activities to go along with them, and the pages the activities are on. Keep in mind that some parks fit multiple groups, so you can complete many activities while visiting only one park!

Group	Parks	Activities	Page
History	Sanchez Adobe Woodside Store	Ohlone Land Acknowledgement	11
		Linking the Past and Present	12
		Stuck in the Past	13
Riparian	Memorial San Pedro Valley	Riparian Bingo	14
		Watershed Maze	15
		Animal Detective	16-17
Scrub/Chaparral	Pillar Point Bluff	Scrub/Chaparral Bingo	18
	San Pedro Valley	Fire Ecology Word Choice	19
	Memorial	Animal Diner	20
	Wunderlich		
	Edgewood		
	Junipero Serra San Bruno Mountain		



TABLE OF CONTENTS

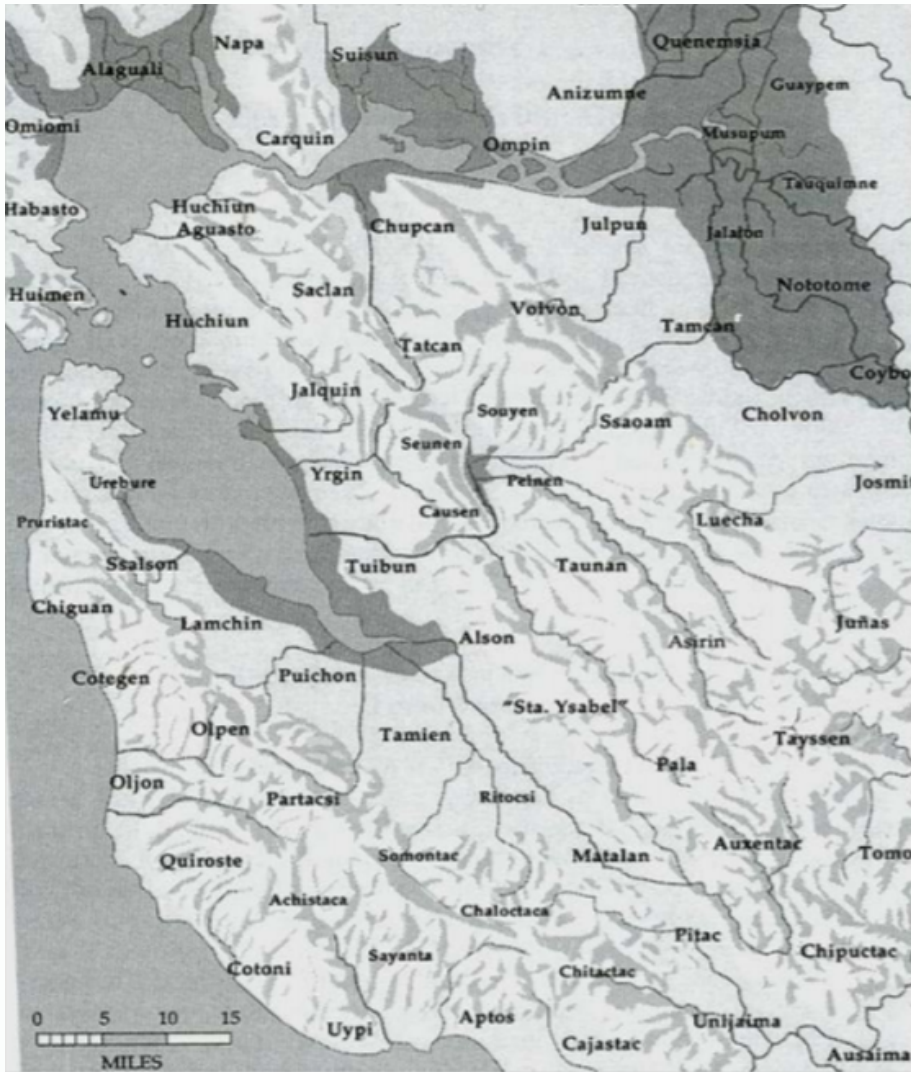
ACTIVITY LIST

Group	Parks	Activities	Page
Redwood	Memorial	Redwood Bingo	21
	Sam McDonald	Explore the Redwoods	22
	Huddart	Tree Rings	23
	Wunderlich		
Intertidal	Fitzgerald Marine Reserve	Read the Tides	24
	Coyote Point	Protect the Harbor Seals!	25-26
		Best Beaks	27
Oak Woodland	Memorial	Oak Woodland Bingo	28
	Sam McDonald	Senses Exploration	29
	Huddart	ID a Tree	30
	Wunderlich		
	Junipero Serra		
	San Bruno Mountain		
	Edgewood		
	San Pedro Valley		
Grassland	Edgewood	Grassland Bingo	31
		Checkerspot Butterfly Origami	32-33
		Grassland Crossword	34

HISTORY

OHLONE LAND ACKNOWLEDGEMENT

The Ohlone are the indigenous group whose ancestral land contains San Mateo County Parks. They have lived on this land since roughly 10,000 BC!



"Ohlone" is actually a term used to include a wide variety of Native American language groups. This map shows the language groups of the Ohlone people.

Circle the group that is closest to where you live.



As a way to honor their ancestral land, we say aloud a land acknowledgement. For example, "I am from Sunnyvale, the ancestral land of the Ohlone." This recognizes whose ancestral land you are on.

Give a **land acknowledgement**.

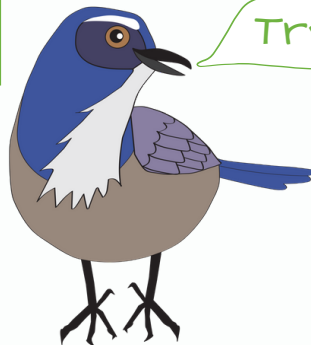
HISTORY

LINKING THE PAST AND PRESENT

Look at the Answer Key!

Think about your current home, or habitat! You use some things that everyone needs to survive, no matter the place or time period. **Connect the pictures of things you use today with the corresponding tools and objects the Ohlone used in the past.**

As you see, acorns were a food staple for the Ohlone. The Ohlone would grind acorns between two rocks to break open the shell. They would then grind them into a fine powder and soak the meal to get rid of tannins, nasty stuff that can make you sick if you eat a bunch of it! After, they would boil it into a soupy stew, like oatmeal.



Find an acorn, a nut, or some hard piece of food from your home (with your family's permission!) and try grinding! Place your food of choice on a flat rock or a sidewalk. Find another, bigger and more round rock, and grind your food into powder!





HISTORY

STUCK IN THE PAST

Circle which historical site you are visiting: **Sanchez Adobe** or **Woodside Store**.

You've gotten caught in a time machine and are now whizzing back through time! Miraculously, your high-tech phone still works in the past! To help you adjust to your new reality, we put information about the past on the app **OuterSpatial**. Look up the park you're in and read about where and when you are!

Pick a job you think you'd do well.

What is the job and around what year are you working it?

Think about your job. What kind of clothes would you wear for it? Is there anything you would need to adapt to your new lifestyle? Draw your work clothes:

Why would you be good at it?

Just as you're figuring out how to live life during this time, all of a sudden you're back in the present! Phew! **What did you like most about being in the past? What did you like the least?**



RIPARIAN






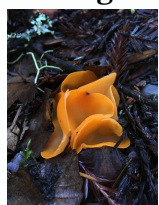



RIPARIAN BINGO

Let's play BINGO!

Riparian areas have a great diversity of invertebrates, like slugs and insects. Keep a lookout for animal prints in the mud but don't slip! Try to find three in a row - across, down, or diagonal.

DID YOU KNOW? Our riparian habitats have endangered species, like the steelhead trout. The habitat is very sensitive, so make sure you follow the Park Rules!



Fern 	FREE SQUARE 	Chewed Leaf 
Newt 	Animal Track 	Fungi 
Banana Slug 	Fish 	Water Strider 



RIPARIAN

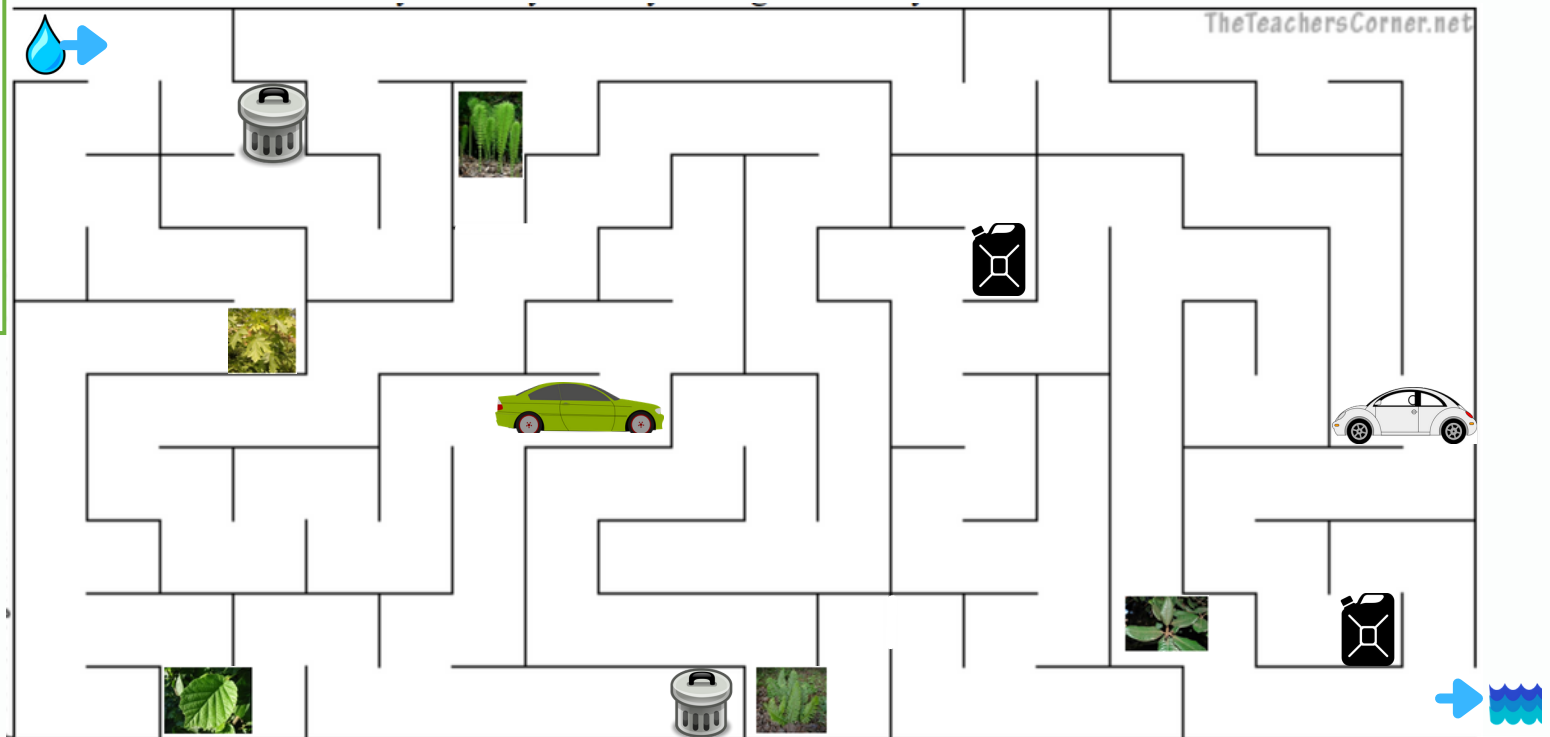
WATERSHED MAZE

The surrounding area that washes into a specific creek or river is called a watershed - for example, the area around Pescadero Creek is the Pescadero-Butano watershed. A clean watershed has a healthy forest, with a good balance of trees, shrubs, and grasses to help block and soak up any pollution.

Guide the water toward the stream. When you encounter a polluter or a plant, go right through but circle them! Pass through as many plants and avoid as much litter and as many cars and gas jugs as possible.

How many polluters did you go through? How many plants?

Would you say your watershed is healthy?



RIPARIAN

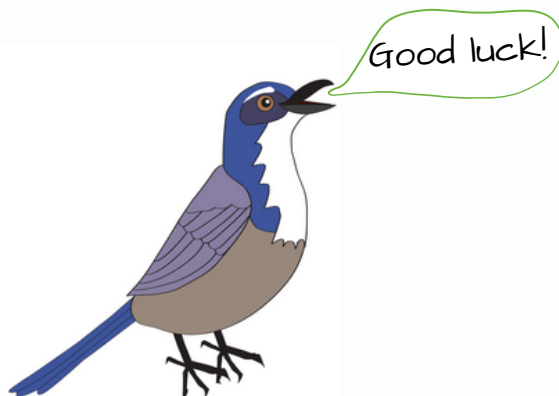
NATURE DETECTIVE

There are organisms all over this riparian area...
and we need a detective to find out which!

We are particularly interested in the FBI... fungi, bacteria, and invertebrates, the decomposers that break down dead stuff!

With such an important job, we need you to **find an FBI** and ensure it is hard at work. **Sketch the FBI** on the next page **and determine what it is decomposing**. Refer to the Case Files for more information.

We also need you to get a sense of the animals in this area. Use the Case Files to help find clues. **Circle which clues you saw** and guess what animal was there. **Write your guess** and a **sketch of your evidence** on the next page!



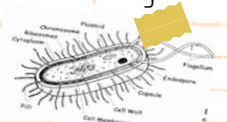
CASE FILES

Fungi, like mold and mushrooms, send out root-like branches underground to break down dead things. It takes 50 - 100 years for fungi to turn a fallen tree into dust.



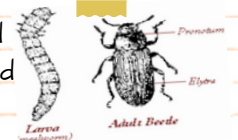
Last seen: On top and under a log

Bacteria are microscopic organisms that can live anywhere and recycle any dead thing. Together with fungi, bacteria are responsible for 80 - 90% of forest decomposition.



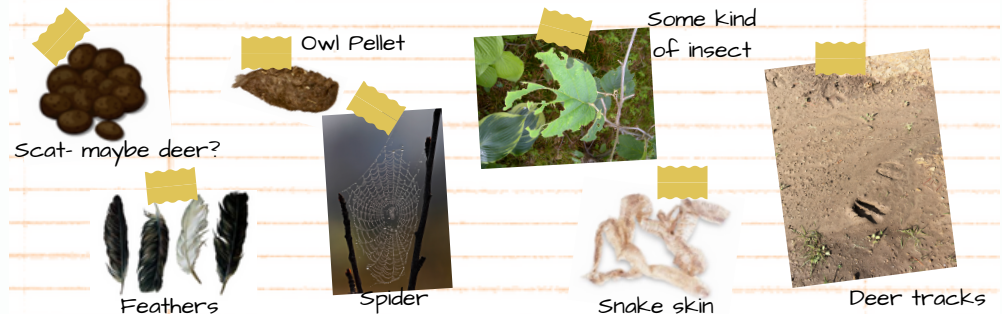
Last seen: Under a microscope

Invertebrates are animals without a backbone, like insects and worms. They break larger dead animals and plants into smaller pieces to be decomposed by fungi and bacteria.



Last seen: Under forest floor mulch

EVIDENCE OF OTHER ORGANISMS





RIPARIAN

NATURE DETECTIVE

Sketch the FBI

Sketch the animal evidence

Look back on the trail behind you. Can you find any evidence that you were there?

Look at your evidence vs. a member of your group's! Is there a difference? What is it?

TRY IT:

Make up a new track! Be sure to stay on the trail!



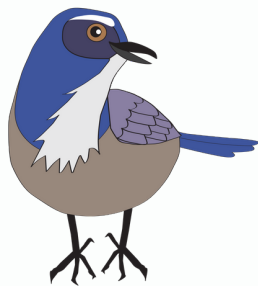
SCRUBLAND/CHAPARRAL

SCRUBLAND/CHAPARRAL BINGO

Let's play BINGO!










The scrubland/chaparral may look dry, but it is full of all sorts of life. It's all over San Mateo County, so check if the park you're in has this ecosystem! Try to find three in a row—across, down, or diagonal.

DID YOU KNOW? A chaparral is a kind of scrubland only found on the west coast, with plants adapted to handle the hot, dry summers and wet winters.



TRY IT:

Many of the animals here are reptiles and love to soak in the sun. Be a Garter snake and stretch out, feeling the warmth from the sun!

Bird Call 	Hawk 	Sagebrush 
Madrone 	FREE SQUARE 	Flower 
Rabbit 	Snake 	Spiderweb 



SCRUBLAND/CHAPARRAL

FIRE ECOLOGY WORD CHOICE

Look at the Answer Key!

Fire is a natural part of all of these ecosystems, but especially chaparral. Once every 30-150 years, a fire will sweep through and completely change the landscape. Many seeds of chaparral plants need fire in order to germinate, or start growing! With fire, new plants have a chance to survive in this ecosystem.

A _____ fire is more intense, and burns away the very tops of trees and bushes. While most ecosystems want to avoid this kind of fire, it is needed in the chaparral to provide open spaces for young plants.

_____ buildup increases the risk of a catastrophic wildfire, uncontrollable by our fire crews. Drought and overcrowding due to lack of occasional fire adds dry, dead plants that are easy to burn.

A _____ burn is done intentionally by trained forest managers to help the landscape regenerate. It also makes sure that there isn't too much fuel buildup to produce an out of control fire.

The red-colored _____ is an example of a fire-adapted plant. When its seeds, buried safely underground by a critter like a squirrel, feel intense heat above, they germinate!

After a fire burns away the brush, it leaves behind ____, which can be full of newly released nutrients for the baby plants to use!



Word Bank

Fuel

Manzanita

Crown

Prescribed

Ash



SCRUBLAND/CHAPARRAL

ANIMAL DINER

Look at the Answer Key!

It is dinner time at the Chaparral Animal Diner and the critters are hungry! Help them find a good, healthy meal. Write the number of the meal on the animal's plate.

Menu

- #1: Stew** - fresh mix of mice, voles, and rabbits with secret snake seasoning
- #2: House Salad** - mixed greens served with twigs, buds, nuts and fruit
- #3: Low Country Boil** - crayfish and frogs with a side of mixed berries, nuts, and grapes
- #4: Trail Mix** - mostly seeds, mixed with Toyon berries, insects, and leaves.
- #5: Roast** - a single rodent, slow roasted for about 5 days.
- #6: Salsa** - assorted insects, with different crunky textures and levels of spice
- #7: Sandwich** - peanut butter and jam on multi-grain bread

Red-Tailed Hawk



Gray fox



Mule Deer



California Quail



Western Fence Lizard



Ranger



Garter Snake





REDWOOD

REDWOOD BINGO

Let's play BINGO!

In the cool, moist, dark redwood forest, the plants are abundant but the animals are very good at hiding. Make sure you check where you step to avoid a banana slug! Try to find three in a row-across, down, or diagonal!

DID YOU KNOW? Coastal redwoods are the tallest (up to 377 feet!) and one of the oldest (over 2,000 years!) trees in the world!



FREE SQUARE 	Banana Slug 	Steller's Jay 
Fern 	Spiderweb 	Redwood Cone 
Douglas Fir Cone 	Redwood Sorrel 	Douglas Iris 



REDWOOD

EXPLORE THE REDWOODS

Find a large redwood tree in the park you visit (at Memorial Park look in the Day Use Area on the Tan Oak Nature Trail, at Huddart Park try the Redwood Nature Trail). Take a picture next to the large tree with your family, staying on the trail, and answer the following questions about the tree.

Imagine you are the first person to see these tall redwood trees.
How would you describe them to your friends?

What might these trees have lived through during the last 1,000 years?

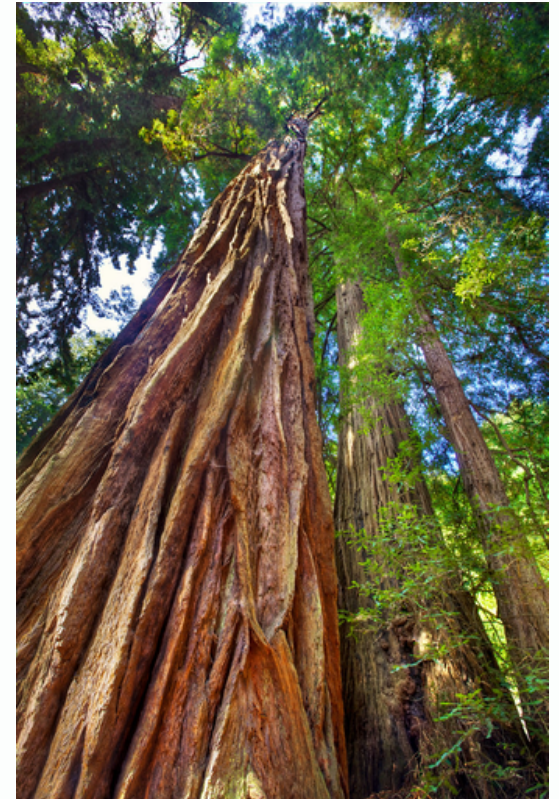
If you were a redwood tree, what would you like to tell people visiting here today? 100 years from now?

Why do you think redwood trees can live so long? What is their secret?

Why do you think the bark is thick?

Does your tree have any fire scars (fire scars are large black areas on the bark)?

What would you name your tree?





REDWOOD

TREE RINGS

Look at the Answer Key!

This cross-section of a tree shows its growth rings. Each year a growth ring is produced by the tree adding a new layer of wood just under the bark. Count the number of rings on this tree and you will know its age!

Tree rings can also tell us when there were good years and bad years for growth and when a tree was damaged by fire, disease or by other trees falling.

Pretend this tree was cut down yesterday. From the outermost ring, count back to the number of years you've been alive (if you're 10, count back 10 rings!) and mark it. Do the same with a member of your household!

Keep on counting and write down about how old this tree was when it was cut.

Do some math and find out the year it germinated (grew from a seed!)

TRY IT:

Find a redwood tree right next to the trail and thank it for giving us oxygen for hundreds of years!





INTERTIDAL

READ THE TIDES

Look at the Answer Key!

Before going to an intertidal area, you need to make sure the tides are in your favor! Usually, that is when there is a very low tide, so you can walk on the beach or look for creatures in tide pools! Otherwise, at high tide, most land is covered in water and potentially inaccessible or dangerous.

This is a **tide chart**. It tells you when there will be low and high tide! You can check these day of or months in advance, at <https://www.tides.net/california/>.

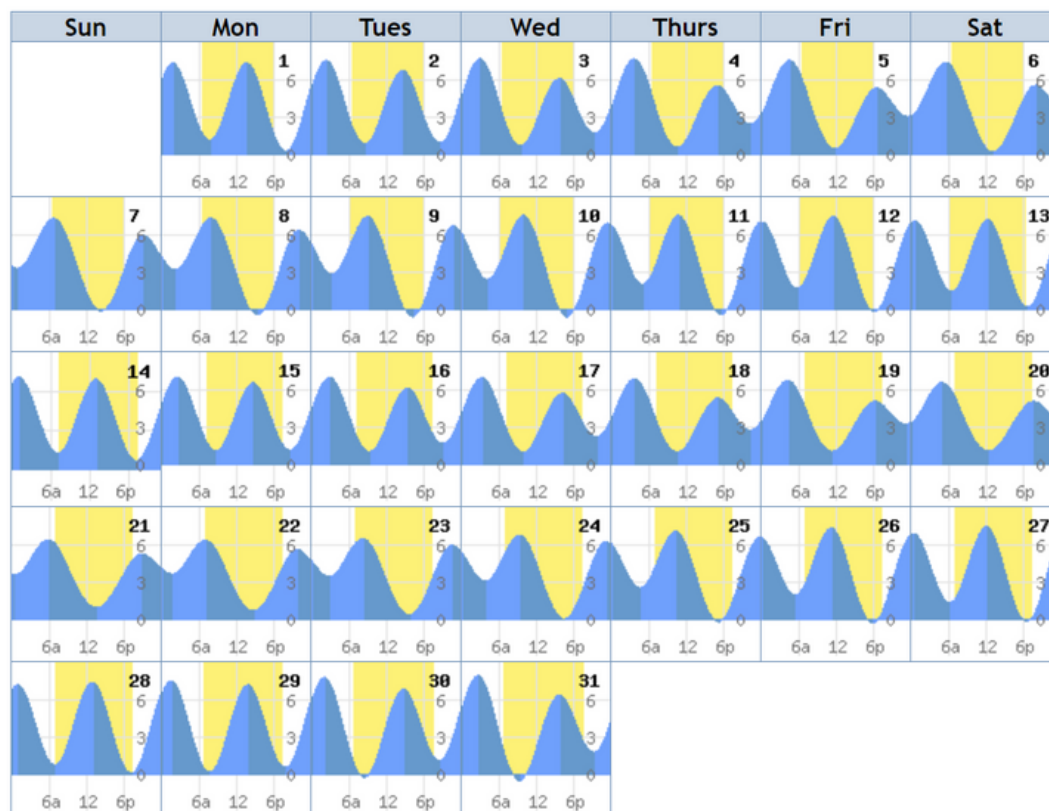
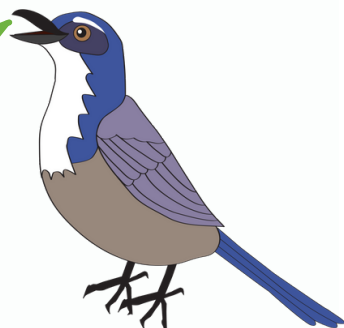
Circle the lowest tide of each day.

Circle the highest tide of each day.

Sometime the tides hit the lowest and highest mark twice- just circle one!

When would be a good time for you to go to an intertidal area during this month?

DID YOU KNOW? Intertidal creatures are super sensitive to human contact so remember to look, not touch, even at low tide!





INTERTIDAL

HELP PROTECT THE HARBOR SEALS!

Along the coast at Fitzgerald Marine Reserve and Cowell-Purisima Trail lives a peculiar group of marine mammals- harbor seals! The harbor seals live there year-round and have their babies, called pups, each spring! The seals are afraid of humans, so the rangers put up cones to keep people from walking too close to the seals and disturbing them. If we get too close we stress out the seals and can lead the mothers to abandoning their pups.



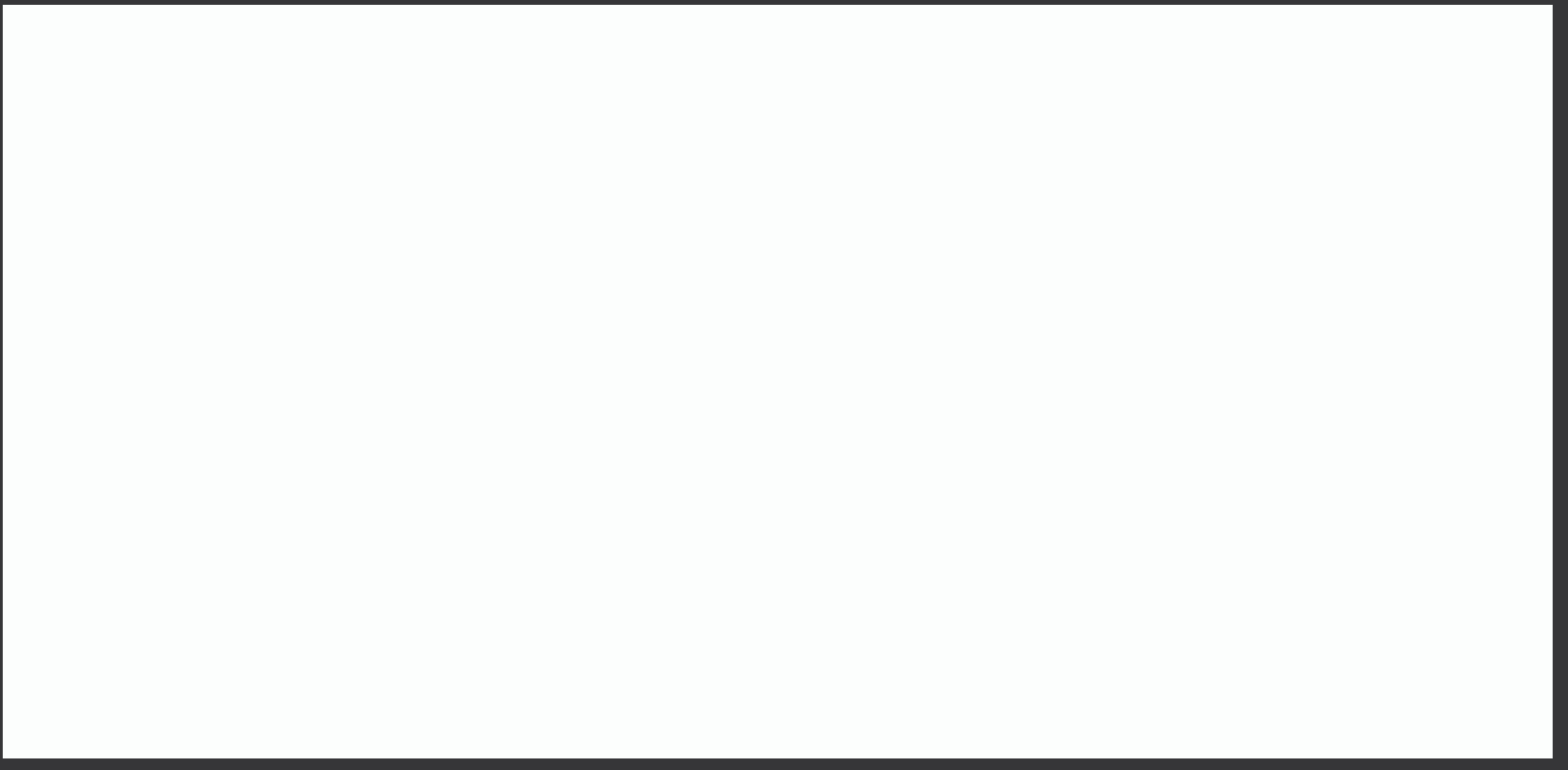
Help us protect the seals by drawing a poster that we can share with the visitors to explain why they should stay behind the cones! Remember to sign your masterpiece!





INTERTIDAL

HELP PROTECT THE HARBOR SEALS!



INTERTIDAL

THE BEST BEAKS

Look at the Answer Key!

When you live in an intertidal area, there are all sorts of delicious critters to eat! Some are in the tidepools- others, in the soft sand. As the safety of the water leaves when the tide goes out, the critters are exposed to hungry shorebirds, even if they're buried deep in the sand!

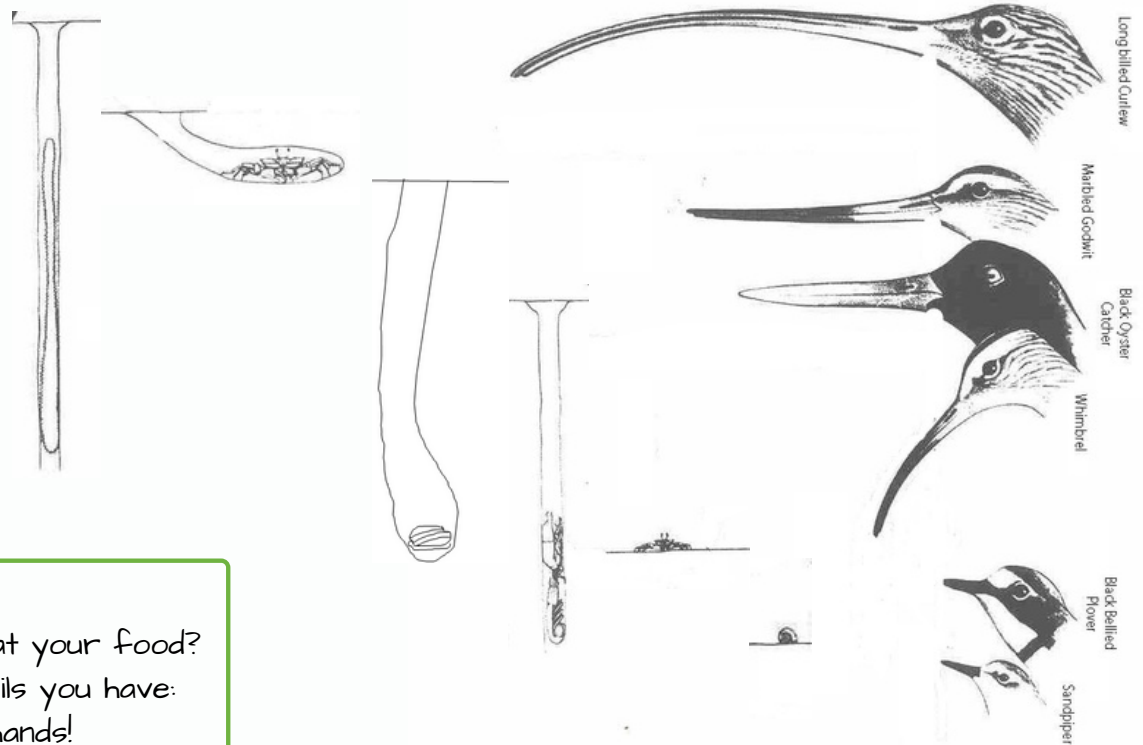
Even though multiple shorebirds live in the same intertidal area, they have different **niches**, or different ways of living, so they do not compete with each other! Each species evolved unique beak shapes and sizes, an **adaptation** to go after different kinds of prey.

Some shorebirds dig for prey deep in the sand with long curved beaks, while others with short and strong beaks pick off creatures on the surface

Match a shorebird bill to a prey. There is more than one good answer for each!

TRY IT:

What kind of "beak" would work best for you to eat your food?
Pick a food and try to eat it with whatever utensils you have:
fork, spoon, chopsticks, maybe even your hands!





OAK WOODLAND

OAK WOODLAND BINGO

Let's play BINGO!

There are all sorts of cool organisms in an oak woodland- luckily, many of our parks include this ecosystem! Keep your eyes peeled while exploring and try to find three in a row- across, down, or diagonal!

DID YOU KNOW? The most common oak in our oak woodlands is the coast live oak, with thick, spiky leaves.



Lichen 	Feather 	Flower 
Poison Oak 	Squirrel 	Woodrat Nest 
FREE SQUARE 	Coast Live Oak 	Chewed Leaf 



OAK WOODLAND

SENSE EXPLORATION

Part of being a Junior Ranger is exploring your parks- but there's more than one way to explore! For this activity, explore by your sense of touch, smell, sound, and sight.

Touch

What does the air feel like? Is it warm or kind of cold? Is there wind? Is the air humid?

Many animals rely heavily on their sense of touch- especially the ones underground! They use touch to move and feed.

Smell

Walk up carefully to a plant (make sure it isn't poison oak or stinging nettle!). Take a deep sniff. What does it smell like?

Some animals use smell to communicate, like when animals mark territory by peeing. Gross, but the smell says stay out!

Sight

Look around you. What is the most common color you see? Can you find anything with the same color as your clothes? What is it?

Some animals blend in, or camouflage, to their surroundings to hide. Others want to be seen! For example, some insects display vibrant colors to showcase they are poisonous- predators, beware!

Sound

Close your eyes and cup your hands behind your ears, so that your ears are facing forward. What do you hear?

You've made your ears in the shape of a deer, or a cat, or, well, many animals! The more cup-shaped your ear, the more sound gathers into the cup shape and into your ear, so the better you hear.

TRY IT: Be a deer! Find a spot where you camouflage and cup your hands around your ears. Be on alert for any predators!

OAK WOODLAND

ID A TREE

Test your skills of deduction to identify leaves of a nearby tree in the park using the following key!

1. Does your leaf have **lobed** edges (like an earlobe)?
 - a. If no, go to #2.
 - b. If yes, it may be a VALLEY OAK
2. Are the leaves grouped in a **palmate** pattern (like fingers on a hand)?
 - a. If no, go to #3.
 - b. If yes, it may be a CALIFORNIA BUCKEYE
3. Does your leaf have **serrated** edges (like a knife)?
 - a. If no, go to #4.
 - b. If yes, it may be a COAST LIVE OAK
4. Is the shape of your leaf **lanceolate** (elongated and pointed at both ends)?
 - a. If no, it is a MADRONE
 - b. If yes, it may be a CALIFORNIA BAY

CALIFORNIA BAY



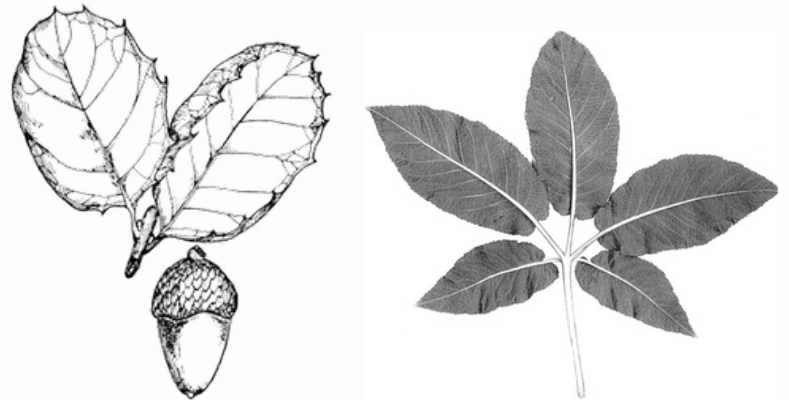
VALLEY OAK



MADRONE



COAST LIVE OAK CALIFORNIA BUCKEYE



If your tree is not one of these you can use plantID.net to try to identify your leaf!

GRASSLAND










GRASSLAND BINGO

Let's play BINGO!

You will have to look above and below for these organisms, and keep your ears open for any bird calls! Try to find three in a row-across, down, or diagonal!

DID YOU KNOW? Edgewood County Park has a lot of serpentinite, our state rock! It is green-ish and makes a tough soil so the organisms there have unique adaptations to handle it.



Bee 	Butterfly 	Turkey Vulture 
FREE SQUARE 	Flowers 	Purple Needlegrass 
Fence Lizard 	Hawk 	Serpentinite 

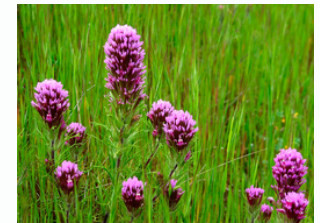
GRASSLAND

CHECKERSPOT BUTTERFLY ORIGAMI



The checkerspot butterfly is **endemic** to the Bay Area- or, is only found in the Bay Area! They are picky about their home, and like to live in grasslands full of specific plants called **host plants**, where they can lay their eggs. Their two main host plants are California plantain and Owl's clover.

California plantain



Owl's clover

Unfortunately, because the checkerspot is so picky, they are classified as **threatened** and are not doing well. While they used to be found to the east, west, and south of the Bay, because of **habitat loss** from the decline of their host plants, they now are only found in next door Santa Clara County.

Conservationists are trying to reintroduce the checkerspot to Edgewood County Park- and you can help! Keep your dogs at home while visiting Edgewood and stay on the trail while you explore the park!



On the next page, color in your checkerspot butterfly and follow the origami instructions!

Explore Edgewood!

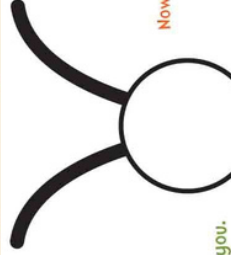
Origami Butterfly

Fold it!

Suggested for Ages 8 to 11

Directions:

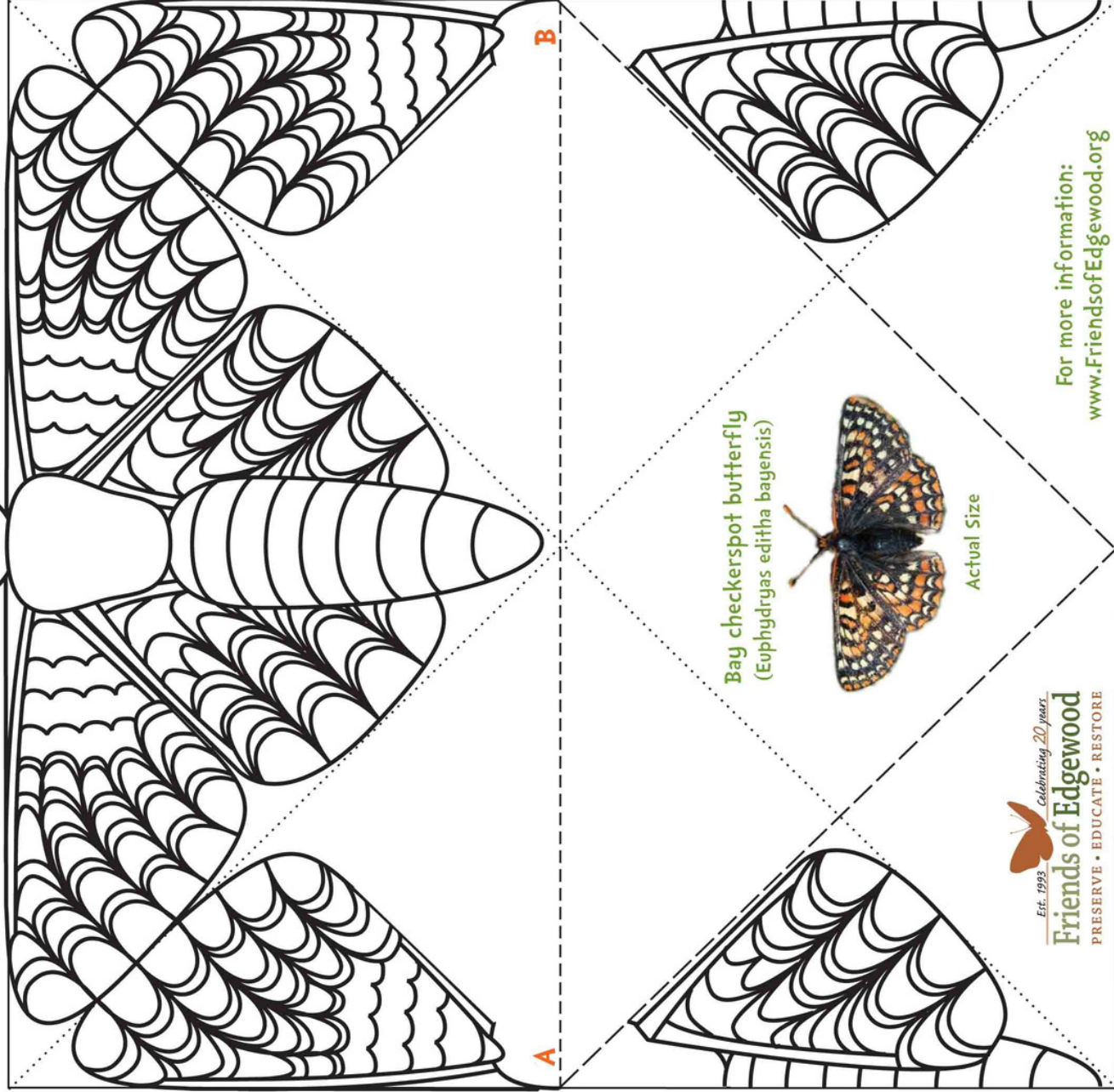
1. Color the butterfly.
2. Cut out the square and head.
3. Fold the dotted lines in a mountain fold and unfold.
(The drawing will be on the outside.)
4. Fold the dashed line in a valley fold and unfold.
(The drawing will be on the inside.)
5. With the drawing side down, pull points A and B toward you.



You should now have a triangular waterbomb shape:



6. Turn your butterfly over and fold the back wings down on the longer dashed lines.
Now you have your very own Bay checkerspot butterfly to protect!
Can you find an exhibit in the Edgewood Ed Center where your butterfly can find food and friends?





GRASSLAND

GRASSLAND CROSSWORD

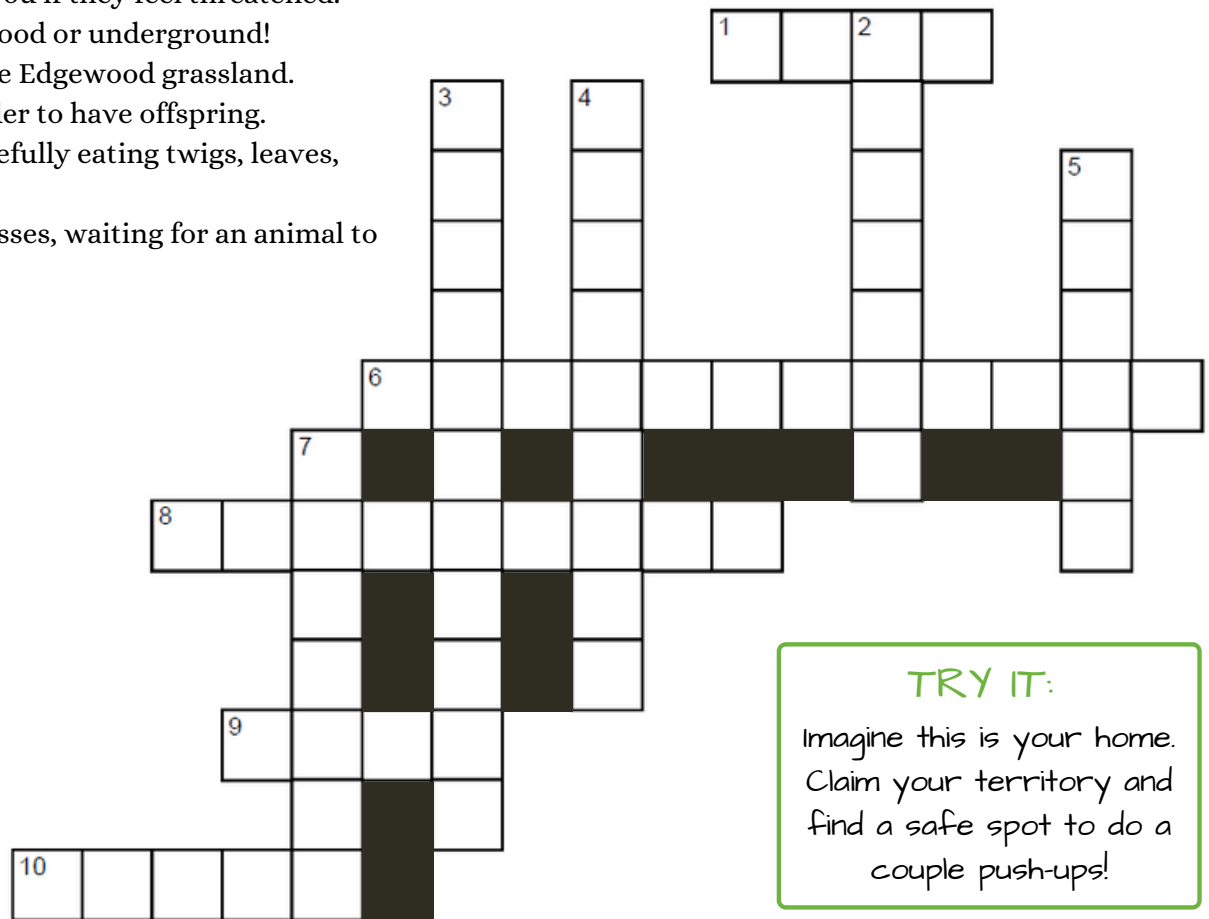
Look at the Answer Key!

Across:

- 1:** Important pollinators, these insects will only sting you if they feel threatened. Most native of these are actually solitary and live in wood or underground!
- 6:** This is the state rock of California and is found in the Edgewood grassland.
- 8:** Many plants need help from insects to do this in order to have offspring.
- 9:** This large herbivorous mammal is often found peacefully eating twigs, leaves, and grasses.
- 10:** These parasites love to hang out on the ends of grasses, waiting for an animal to pass by so they can latch on and drink their blood!

Down:

- 2:** Some organisms are very picky about where they live and therefore can only be found in one location. They are considered this to their location.
- 3:** This reptile loves to bake in the sun, occasionally doing push-ups to claim territory. They are found across San Mateo County's ecosystems, including chaparral.
- 4:** Insects put their eggs on this type plant so their young can live there as larvae. Many insects are picky and only like to use a certain species of plant.
- 5:** This yummy food is a pollinator's reward for flying to a flower.
- 7:** The smell and petals of these plants attract insects and birds



TRY IT:

Imagine this is your home. Claim your territory and find a safe spot to do a couple push-ups!



CHECKLIST

HISTORY

- ☐ Ohlone Land Acknowledgement
- ☐ Linking the Past and Present
- ☐ Stuck in the Past

RIPARAIN

- ☐ Riparian Bingo
- ☐ Watershed Maze
- ☐ Animal Detective

SCRUB/CHAPARRAL

- ☐ Scrub/Chaparral Bingo
- ☐ Fire Ecology Word Choice
- ☐ Animal Diner

INTERTIDAL

- ☐ Read the Tides
- ☐ Protect the Harbor Seals!
- ☐ Best Beaks

REDWOOD

- ☐ Redwood Bingo
- ☐ Explore the Redwoods
- ☐ Tree Rings

OAK WOODLAND

- ☐ Oak Woodland Bingo
- ☐ Senses Exploration
- ☐ ID a Tree

GRASSLAND

- ☐ Grassland Bingo
- ☐ Checkerspot Butterfly Origami
- ☐ Grassland Crossword

Remember you
have to do at least
2 groups or 6
activities!

INTRODUCTION

- ☐ What does it mean to be a Junior Ranger?
- ☐ Park Rules
- ☐ Be Safe
- ☐ Habitats and Ecosystems
- ☐ Take a picture of you at a park working on an activity!
- ☐ Take a picture of your completed activities and this checklist!
- ☐ Say the Junior Ranger Pledge!

You have to do
all of these!



JUNIOR RANGER PLEDGE

CONGRATULATIONS!

You have completed the activities needed to be a San Mateo County Park Junior Ranger! Being a Junior Ranger is fun, but there are responsibilities. You now must take the Junior Ranger Pledge as said by Scout. You may take the pledge with a Ranger! Check out the website for more information. To take the pledge at home, raise your right hand, have a friend or family member read the Junior Ranger Pledge to you, and repeat the pledge after them.



"I, (your name), promise to help take care of the parks! I will follow Leave No Trace and respect the plants and wildlife. I will continue to explore and learn more about nature and history and share my discoveries with others. I will encourage my family and friends to help protect the parks and all of our natural resources."



Y C B E S L C C E R Y Y H E E G H M D W L E I
E N C M Q L U T C C C R E A T I V E T A A I
H X Y W W K Y F W H I K E R V P W X D S D Q
M Q X E C I N C T J T T W P I S N H W L V L
K G Y A P G C O A C T Q S H D Y T R L U E U
S Z I D V K M X W R E S G I Z U E F D F N F
A R T I S T I C S L I P I F M E E G N T T H
R X C I T E G R E N E N S T G I F A M H U C
G I R Q R G M T T B I D G E N K T E S G R T
U T N E G I L L E T N I G L R E C P G U O A
P A S S I O N A T E T T F E F S I B O O U W
U O H I S T O R I A N S I H A Y L C B H S Z
K N K O D H Z A C Z P W S P L B T Q S T J W
T S E N O H I P K T Q I S N Q E L S X F C H
H E L P F U L J W W S V P V F R I E N D L Y

STAY ON TRAIL
DO NOT APPROACH WILDLIFE
DO NOT PICK FLOWERS OR PLANTS
DO NOT LITTER, PUT TRASH IN GARBAGE BINS
STAY CLOSE TO AN ADULT
HAVE CAMPFIRE IN FIRE PITS ONLY
FISHING AND HUNTING ARE NOT PERMITTED
DO NOT FEED WILDLIFE
JUNIOR RANGERS ARE PARK SAFE

Banana slug -- Redwood
Anemone -- Intertidal
Western fence lizard -- Scrub/Chaparral
Coast live oak -- Oak woodland
Steelhead trout- Riparian
Checkerspot Butterfly -- Grassland

A **crown** fire is more intense...

Fuel buildup increases the risk ...

A **prescribed** burn is done intentionally...

The red-colored **manzanita** is an example...

After a fire burns away the brush, it leaves behind **ash**...

Red Tailed Hawk: #1 Western Fence Lizard: #6
Gray Fox: #3 Ranger: #7
Mule Deer: #2 Garter Snake: #5
California Quail: #4

Good time to go: Any negative tide- like the 8th around 3pm

[illegible]

1: Bees
2: Endemic
3: Fence Lizard
4: Host Plant
5: Nectar
6: Serpentinite
7: Flowers
8: Pollinate
9: Deer
10: Ticks