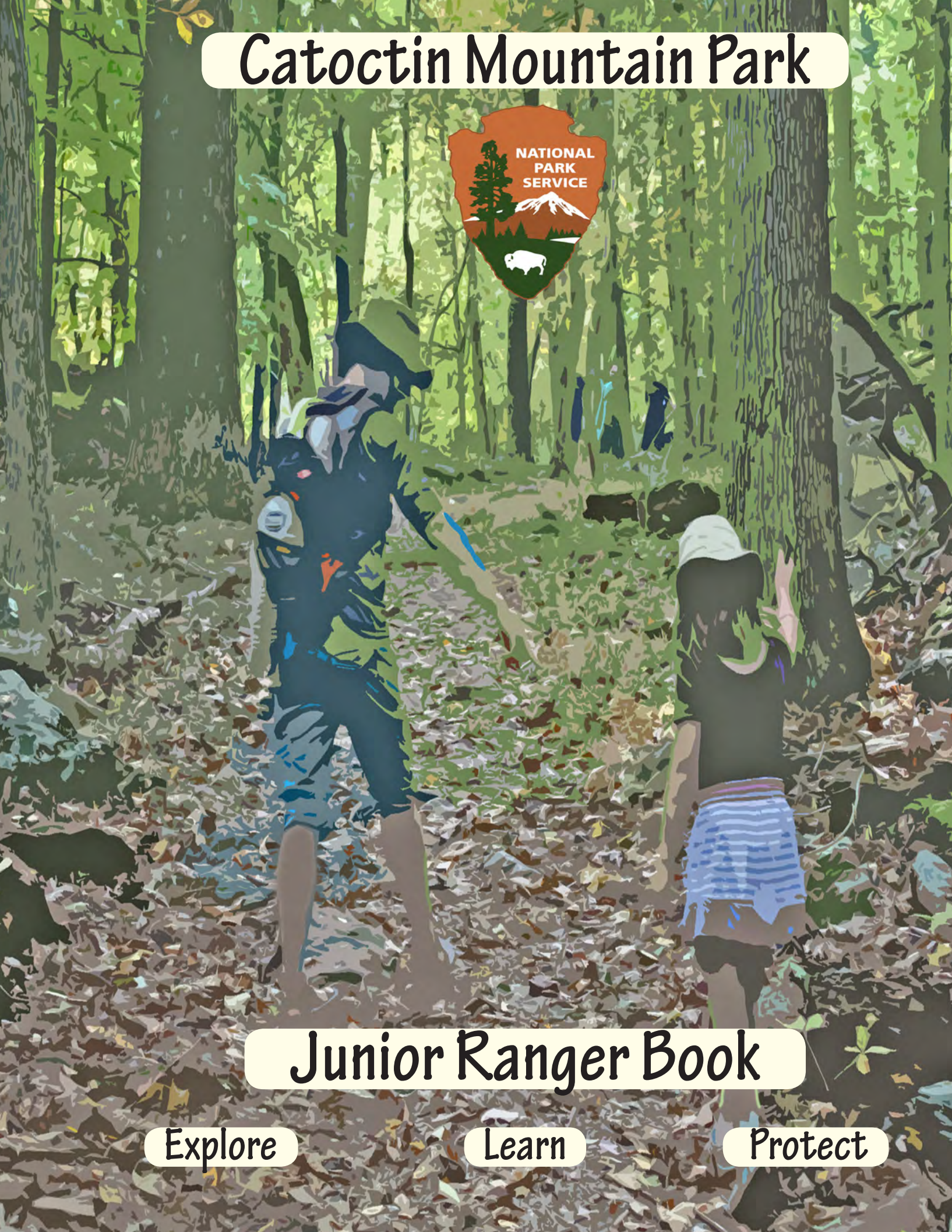
Catoctin Mountain Park



Junior Ranger Book

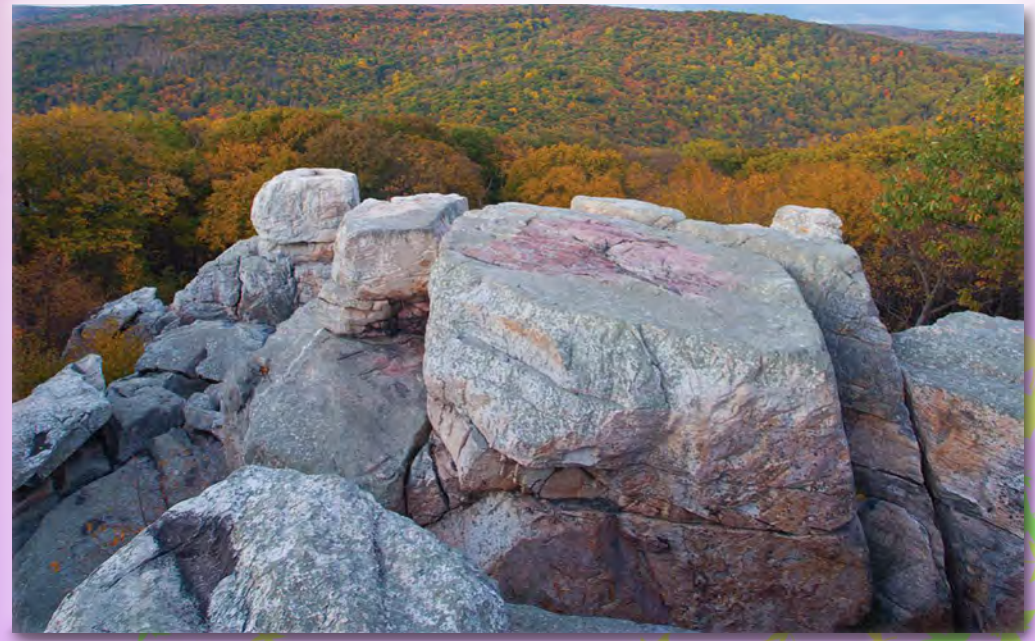
Explore Learn Protect

Hello Junior Ranger and WELCOME to Catoctin Mountain Park!

As one of over 400 sites protected by the National Park Service, Catoctin Mountain Park is a place where you can enjoy nature and explore the rich and vibrant history of the mountain and its people.

From its early beginnings in the 1930's all the way to today, the park has served as host to campers, hikers, nature enthusiasts, historians, and even as a getaway place for many American Presidents!

Enjoy your exploration of the park as you learn about all the wonderful things that make Catoctin Mountain Park so special!



Chimney Rock

Let's Get Started!

Historic Park Sign

Wolf Rock

Owens Creek Campground

Log Cabin at Camp Misty Mount

Over 25 Miles of Hiking Trails!

- **If you are 6 years old or younger, complete at least 4 activities.**
- **If you are between 7 and 9 years old, complete at least 9 activities.**
- **If you are between 10 to 12 years old, complete at least 12 activities.**
- **If you are over 12 years old, complete all of the activities.**

Once you complete the activities, bring your book to the Visitor Center and have a ranger review your answers with you!

Be Safe & Be Courteous!

- **Stay on all designated trails.**
- **Do not feed any of the animals.**
- **Do not pick any plants or flowers.**
- **Do not climb on any historic structures.**
- **Remember to recycle and to put all trash in a trash can.**

The Arrowhead

Located within the design of the arrowhead you will find key design elements which symbolize the many natural, cultural, and historic resources that the National Park Service protects and preserves. **Match the images of things found in Catoctin Mountain Park to the resources found on the arrowhead.**

Geology: Rocks and Mountains
(Chimney Rock)

History
(Historic Log Cabins)

Waterways and Wetlands
(Owens Creek and Big Hunting Creek)

Trees and Plants
(Mountain Laurel)

Wildlife
(Black Bear)

In 2016, the National Park Service celebrated its **CENTENNIAL** anniversary. A centennial is a time span of 100 years.

Want to know more?

Even before the National Park Service was formed in 1916, the United States had created many National Parks. Visit www.nps.gov/yell to find out which park was the first national park.

Things To Do To Help Protect The Park

These visitors need your help! Draw what's missing from each picture to help them have a happy and safe visit in the park!

Hint: Pets need to be on a leash.

Hint: Fires need to be attended or put out.

Hint: Hikers need water, sun protection, maybe long pants. What else could they use?

Hint: Trash or recyclable items need to go into a trash can or recycle container.

Not so long ago, there were not many trees or animals living on the mountain. By following the rules, you can help ***ENSURE*** (make certain) that the forest and animals remain healthy and beautiful.

Want to know more?

Ask a park ranger about other things that you can do to be safe and to protect the park.

Red Fox

White-tailed Deer

CAN YOU TRACK THAT?

Raccoon

Opossum

Although sometimes they are hard to see, many animals live in Catoctin Mountain Park. When you explore the park you might see evidence of animal activity on the ground in the form of tracks. Unscramble the letters below and discover what kinds of animals make these tracks.

This is one of the largest animals that live in the park. It has a distinctive "two-toe" track for each foot.

_ _ _ _ _
I W T E H

_ _ _ _ _ _
L T E D I A

_ _ _ _
E R E D

The front paws of this "masked" animal look very similar to a human hand, which makes it easy for this animal to grasp things.

FRONT

BACK

_ _ _ _ _ _ _
N C O O A C R

This bushy-tailed animal likes to walk as straight as possible. When it walks, it tries to put its back paw where its front paw stepped!

_ _ _ _ _ _
E D R O X F

This animal has a long tail and likes to climb trees! It uses one of its back toes just like a thumb to hold on to parts of the tree as it climbs!

FRONT

BACK

_ _ _ _ _ _ _
P M O O U S S

Catoctin Mountain Park is more than a park! It is the **HABITAT** for all of the plants and animals on the mountain. A habitat is a place where you can find food, water, shelter, and enough space to live in.

Want to know more?

Find out more about the different types of animals at Catoctin Mountain Park online at: https://www.nps.gov/cato/learn/nature/animals.htm

Draw Your Visit!

During your time here, draw a picture to show what fun things you did in the park.

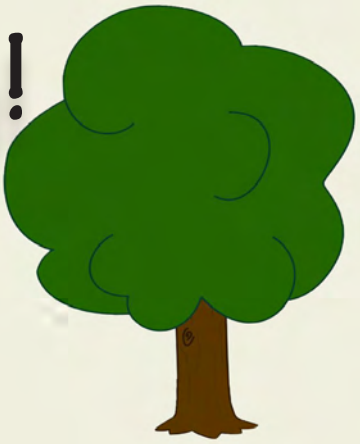
The name **CATOCTIN** (pronounced KA-TOCK-TIN) is thought to come from the Kittocton American Indians.

Want to know more?

To find out more about the people who used to live and work on the mountain, ask a park ranger about them or visit:

www.nps.gov/cato/learn/historyculture/people.htm

Let's Do A Leaf Rubbing!



Find an interesting leaf, place it under this paper, and color the paper with your pencil or crayon.

Most of the trees located in Catoctin Mountain Park are ***DECIDUOUS*** (pronounced DEE-SID-YEW-US) trees. That means the trees drop their leaves in the fall and re-grow new leaves in the spring!

Want to know more?

You can find out more about the forest in Catoctin Mountain Park by visiting: www.nps.gov/cato/learn/nature/forests.htm

Can You Find Me in the Forest?

See if you can find the different animals that are hidden in the puzzle below. Shade in the areas that have a dot and discover where these sneaky critters are hiding! Use the list to help you find them all.

DRAGONFLY * DEER * RABBIT * BARRED OWL * RACCOON * BAT * SNAKE * CARDINAL * WARBLER * MOUSE * BEETLE * SQUIRREL * WOODPECKER * CHIPMUNK * FOX * GREAT HORNED OWL * FROG

Many animals have adapted their fur, feathers, and scales to make them hard to see by other animals. This use of ***CAMOUFLAGE*** helps them to hide.

Want to know more?

You can find out more about the animals that live in Catoctin Mountain Park by visiting:
www.nps.gov/cato/learn/nature/animals.htm

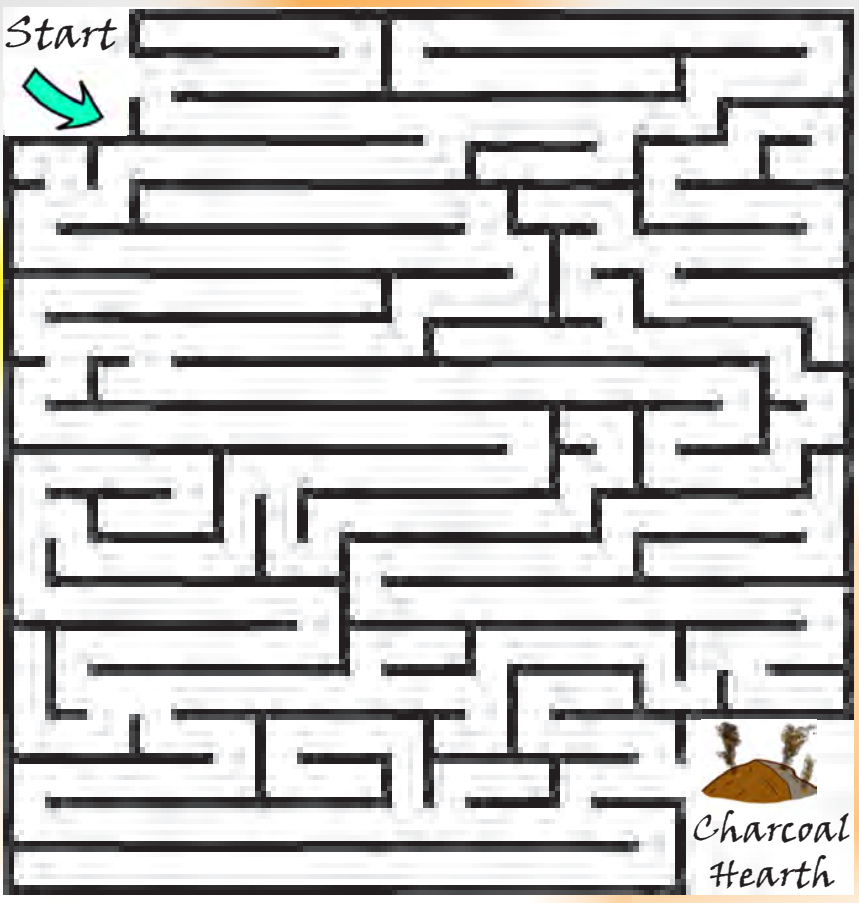
Smoke on the Mountain!

Colliers sitting by their dirt and wooden hut

The charcoal industry arrived at Catoctin Mountain during the late 1770's when the nearby Catoctin Furnace was built. To keep the furnace burning, the ***colliers*** (pronounced *coll-ee-erz*) burned many of the trees on the mountain to convert the wood into charcoal. It could take up to two weeks to slowly burn the wood in dirt covered mounds called ***hearths***.

Woodcutter Sled

Can you guide the woodcutter sled along the mountain to get to the collier's charcoal hearth?



Charcoal hearth display located on the Charcoal Exhibit Trail

If you stacked a pile of wood 4 feet high, 4 feet wide, and 8 feet long, that is called a ***CORD.*** Colliers could make 30-35 bushels of charcoal from one cord. A bushel of charcoal weighs about 30 pounds. How many bushels do you weigh?

Want to know more?

You can explore the story of the wood cutters and colliers of Catoctin Mountain by hiking the 1/2 mile Charcoal Exhibit Trail near the Thurmont Vista parking area.

Which Leaf? Which Oak?

Howdy! My name is Billy. Not so long ago, farmers like me would bring our pigs up to a special place on the mountain that has large boulders and once had a lot of oak trees. When the oaks dropped their acorns, the pigs would gobble them up. YUM! YUM! That's why we named this place **HOG ROCK!** There are three main types of oak trees that live here on the mountain. Do you know how to recognize them just by looking at their leaves?

Draw a line from the description to the the correct oak leaf.

Red Oak Leaf

I can grow 5 to 8 inches in length and I can have 7 to 11 pointy-tipped lobes.

White Oak Leaf

I can grow 4 to 9 inches in length and my lobes are rounded at the tips.

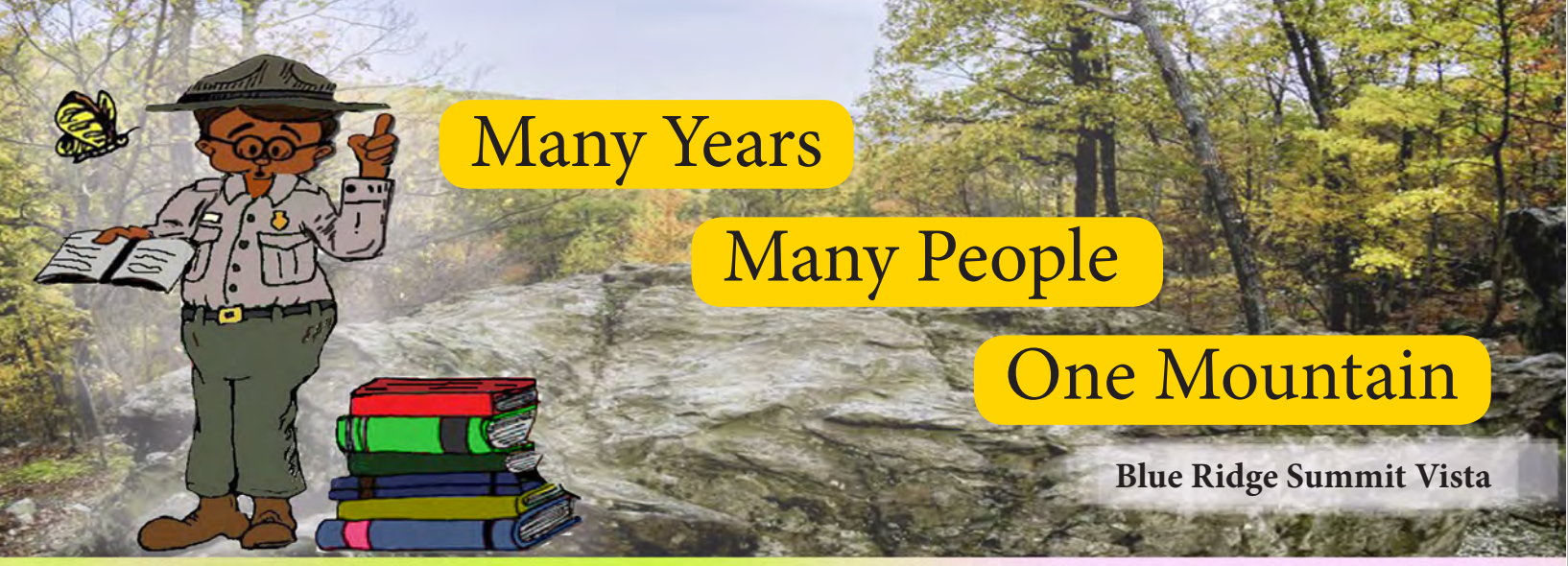
Chestnut Oak Leaf

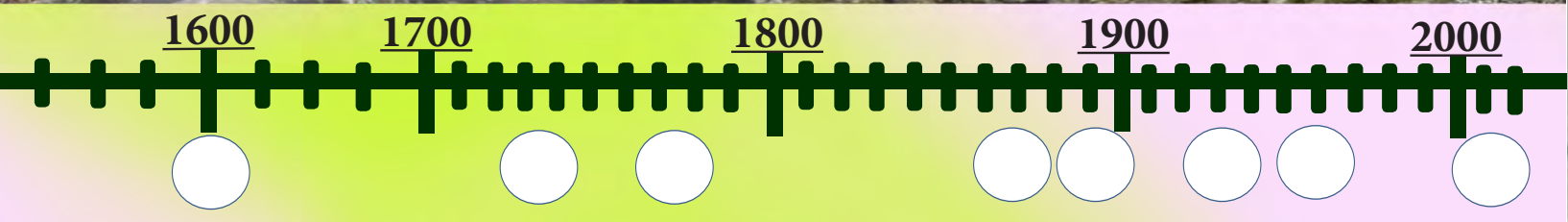
I can grow 6-9 inches in length! I am oval-shaped and my lobes look rounded and wavy.

A ***LOBE*** is a distinct edge, protrusion, or extension of a leaf. A leaf can have MANY, MANY lobes!

Want to know more?

Take a stroll on the *Hog Rock Nature Trail* and you will find labeled signs that will assist you in identifying many of the other trees that grow near Hog Rock.





Create your own Catoctin Mountain Park timeline by writing in the event number listed below to the correct circle in the timeline listed above.

1. **Catoctin Mountain Recreational Demonstration Area created. (1936)**
2. **The Catoctin Furnace is built. Charcoal industry begins on the mountain. (1774)**
3. **After over 8,000 years of use, American Indians stop quarrying rhyolite and other types of stone on the mountain. (about 1600)**
4. **National Park Service celebrates its 100th birthday! (2016)**
5. **European settlers arrive and build towns near the mountain. (1730's)**
6. **Catoctin Mountain Park established. (1954)**
7. **Charcoal industry ends. Logging and lumber industries continue to harvest the trees on the mountain. (1890's)**
8. **Western Maryland Railroad established. Its tracks run near the mountain. The first railroad "tourists" arrive at local hotels & resorts. (1872)**

To make razor sharp tools and projectile points, American Indians would carefully flake off small pieces of rock from a bigger rock with the use of stones or animal bones. This is called KNAPPING (NAPPING.)

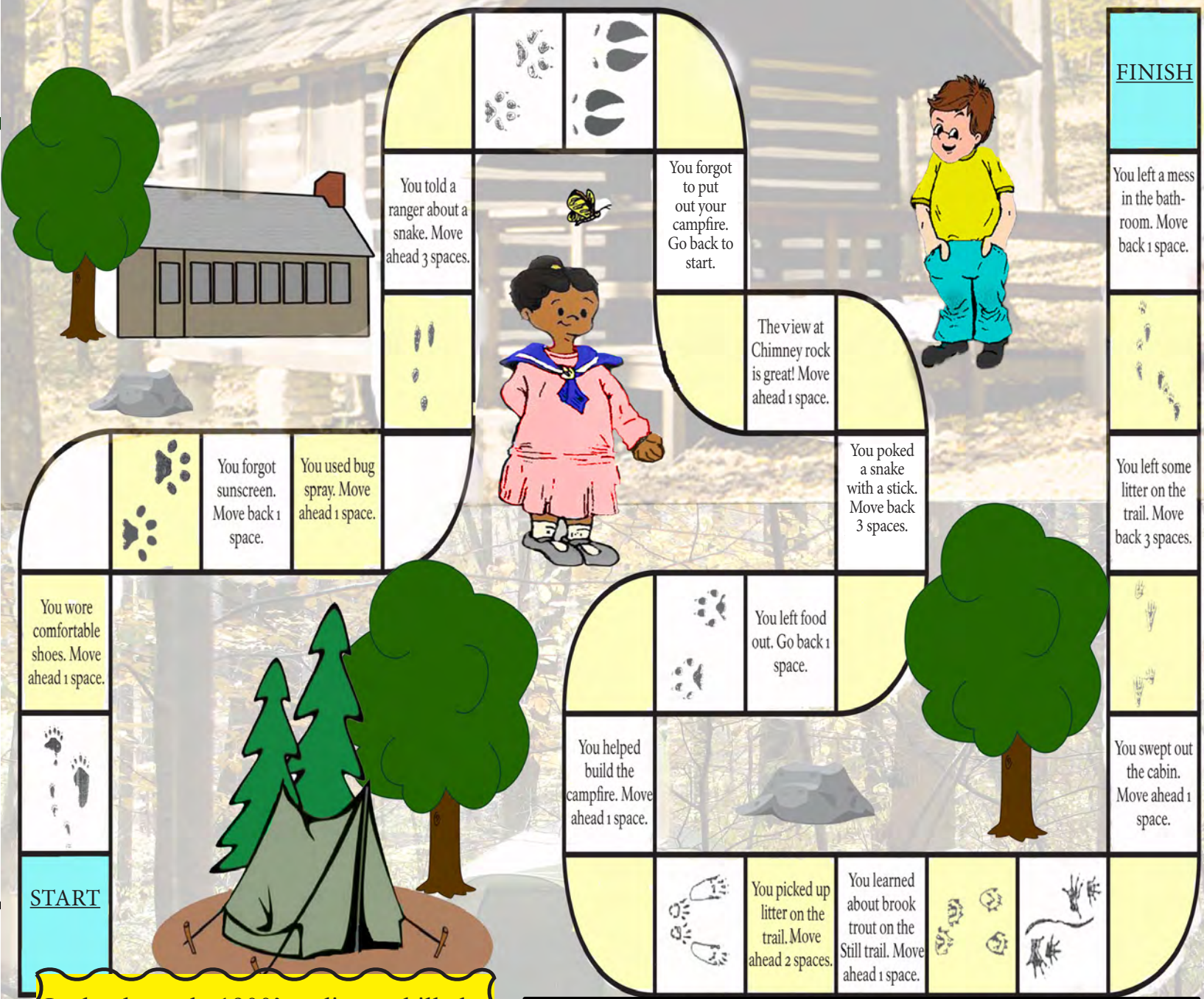
Want to know more?

You can find out more about the types of industries that once operated on Catoctin Mountain by visiting:
www.nps.gov/cato/learn/historyculture/stories.htm

Let's Go Camping!

While you're tent camping at Owens Creek Campground or at one of the historic cabins at Camp Misty Mount, always make sure your visit is safe and enjoyable! Play the camping game below with a family member or friend and learn what you should and should not do while camping.

Use small rocks, nuts, or coins as game pieces and place them on the "Start" square. Take turns flipping a coin. If your flip is heads, move 2 spaces. If it is tails, move 3 spaces. Follow the instructions in the space you land on.



In the the early 1900's a disease killed all of the ***AMERICAN CHESTNUT*** trees that were on the mountain. When the park began in 1936, these dead trees were used to build all of the cabins.

Want to know more?

You can find out more about the cabin camp and tent campground at Catoctin Mountain Park at: www.nps.gov/cato/planyourvisit/campgrounds.htm

Let's Build a Park!

Members of the CCC working on road construction.

Building the Visitor Center in 1941.

Worker Housing at Camp Round Meadow in the 1930's.

Starting in 1936, during the time of the **Great Depression**, work began on what we now call Catoctin Mountain Park. Back then, it was called the Catoctin **Recreational** Demonstration Area.

President Franklin Delano **Roosevelt** had workers from the *Works Progress Administration* (**WPA**) and *Civilian Conservation Corps* (**CCC**) do things like build the log **cabins** at Camp **Misty Mount** and Camp **Greentop**. They also built other places like the **blacksmith** shop at Camp **Round Meadow** and the **Visitor Center** along Park Central Road.

But that's not all they did!

They also planted trees to make a new forest on the mountain…they made **trails** so that people could go hiking….they even built **roads** so that people could drive through the park!

But there was still even **MORE** work to do!

When Lyndon B. **Johnson** was President in the 1960's, members of the newly formed **Job Corps** came to the park to continue the work of the CCC and WPA.

The workers of the Job Corps repaired and updated many of the old buildings along with improving the hiking trails in the park, like the Spicebush Trail at the **Chestnut** picnic area.

President Johnson meeting Job Corps workers at Catoctin Mountain Park.

The **GREAT DEPRESSION** occurred between 1929 - 1939. It was a difficult time for most Americans as many people were out of jobs. Thousands of new jobs were created with the establishment of the WPA and CCC. Many in this new workforce earned their paychecks in national parks.

Word Find

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

Find the words listed below in the puzzle.

BLACKSMITH SHOP
CABINS
CCC
CHESTNUT
GREAT DEPRESSION
GREENTOP
JOB CORPS
JOHNSON
MISTY MOUNT
RECREATIONAL
ROADS
ROOSEVELT
ROUND MEADOW
TRAILS
VISITOR CENTER
WPA

Want to know more?

The very first Job Corps camp created in America was here at Catoctin Mountain Park. You can find out more about what the Job Corps did at the park by visiting:
www.nps.gov/cato/learn/historyculture/jobcorps.htm

Let's Explore Catoctin Mountain Park!

Test your map skills by matching the numbered locations on the park map to the location clues given.

Trails

Wheelchair Accessible

Picnic Area

Parking Area

Tent Camping

Sleeping Shelter

Ranger Station

Cabin Camping

Overlook

Location Clues

You can sleep in the *Adirondack Shelters* which are located in the northernmost section of the park.

The *Sawmill Exhibit* is alongside Foxville-Deerfield Road and directly east of the Owens Creek Campground.

& The most northeastern overlook in the park is the *Thurmont Vista Overlook.* Nearby is the *Charcoal Exhibit Trail.*

The *Blacksmith Shop* is located in the southwestern corner of the park at Camp Round Meadow. It is found on the west side of Manahan Road.

The short trail located west from the Visitor Center will lead you to the *Whiskey Still* exhibit.

& Hiking east and then north on the trail from Park Headquarters will take you to *Chimney Rock Overlook* . Continue on the trail northwest and you will come to *Wolf Rock.*

The wheelchair and stroller accessible *Spicebush Trail* is found along Park Central Road at the Chestnut Picnic area.

& From the Hog Rock Parking area, you can head northeast to the *Blue Ridge Summit Overlook.* From the same parking area you can go south to get to the *Hog Rock Overlook.*

The historic log cabins at *Camp Misty Mount* are located north from the Visitor Center and east from the Hog Rock Overlook.

Camp Greentop, found just south of the Chestnut Picnic Area, was established to offer camping experiences for disabled youth groups.

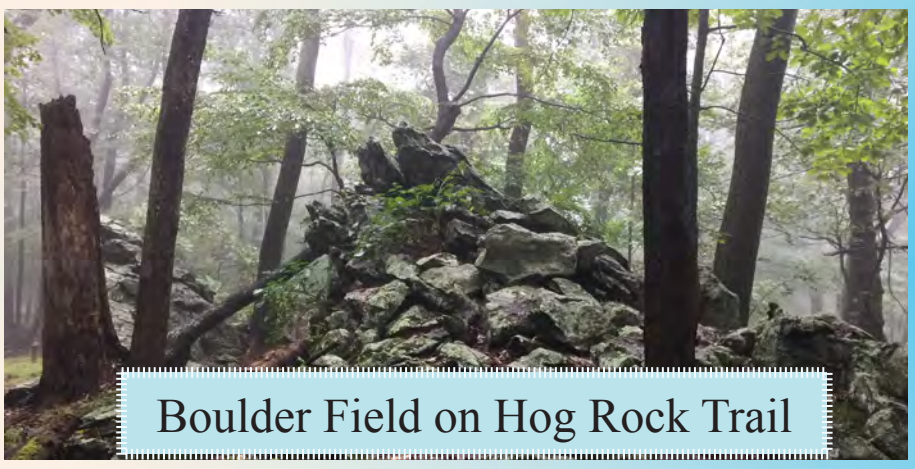
You can test your map and compass skills further with the park's two **ORIENTEERING** courses. Check with a park ranger to find out when the courses are open.

Want to know more?

To find out about the many other places you can visit in Catoctin Mountain Park visit: www.nps.gov/cato/planyourvisit/maps.htm

The Rockin' Geology at Hog Rock!

About 500 **million** years ago the green colored stone found at Hog Rock was molten lava. The lava eventually cooled and formed an igneous rock known as basalt. The basalt sat lower than some of the surrounding land. Later on, the adjacent land eroded and the basalt was covered in sediment. Over a long period of time this basalt became buried beneath other rocks and later, covered by an OCEAN!!



Boulder Field on Hog Rock Trail

Catoctin Greenstone

Continuous change resulted in the land being forced up into a mountain. Tremendous heat and pressure changed the basalt into a metamorphic rock. Over millions of years the layers of rock on top eroded away, revealing the greenstone. Today, this rock is locally known as Catoctin Greenstone.

When hiking to Hog Rock, you are in the Blue Ridge geologic province. To your west lies the ridges and valleys of the Appalachian Mountains. To your east are the rolling hills of the Maryland Piedmont, visible from Hog Rock.

SEDIMENT can be made of many things, including pieces of rock that wash away off the mountain. The sandy material you find in the streams is sediment that once was part of larger rocks on the mountain.

Fill in the blanks below using the information from the story about the geology of Hog Rock. Each blank represents one letter. When you are done, use the letter in each box to discover another name for Catoctin Greenstone.

The rock around you was lava 500 ☐ ___ ___ ___ ___ ___ ___ years ago.

Rocks in the park are constantly wearing away and ☐ ___ ___ ___ ___ ___ ___.

The rolling hills visible from Hog Rock are part of the Maryland
___ ___ ___ ___ ___ ___ ___ ☐.

The Catoctin Mountains are part of the
___ ___ ___ ___ ___ ☐ ___ ___ ___ ___ ___ Mountains.

The greenstone was once ☐ ___ ___ ___ ___ ___ under an ocean.

To see the Maryland Piedmont from Hog Rock, you must look ___ ☐ ___ ___.

Small pieces of rock known as ☐ ___ ___ ___ ___ ___ ___ ___ ___ still wash away every year.

The rock that makes Hog Rock was ___ ☐ ___ ___ 500 million years ago.

Hog Rock is in a geologic province we know as the
___ ☐ ___ ___ ___ ___ ___ ___ ___.

___ ___ ___ ___ ___ ☐ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___
is the common name for the metamorphic rock that makes Hog Rock.

Use the letters from each box above to solve below:
Catoctin Greenstone is also known as ___ ___ ___ ___ ___ ___ ___ ___ ___ ___.

Want to know more?

To find out more about Catoctin Greenstone and the incredible geological history of the area, visit: https://www.nps.gov/cato/learn/nature/geology.htm

A Crossword Fit for the President!

(Read the story to find the answers to the Crossword Puzzle.)

During World War II, President Franklin Delano Roosevelt needed a cool place to go to get away from the heat and stress of Washington. He chose a site in what is now Catoctin Mountain Park. During World War II, he sometimes brought Britain's Prime Minister Winston Churchill to the retreat he called "Shangri-La" so they could plan out how to fight the war.

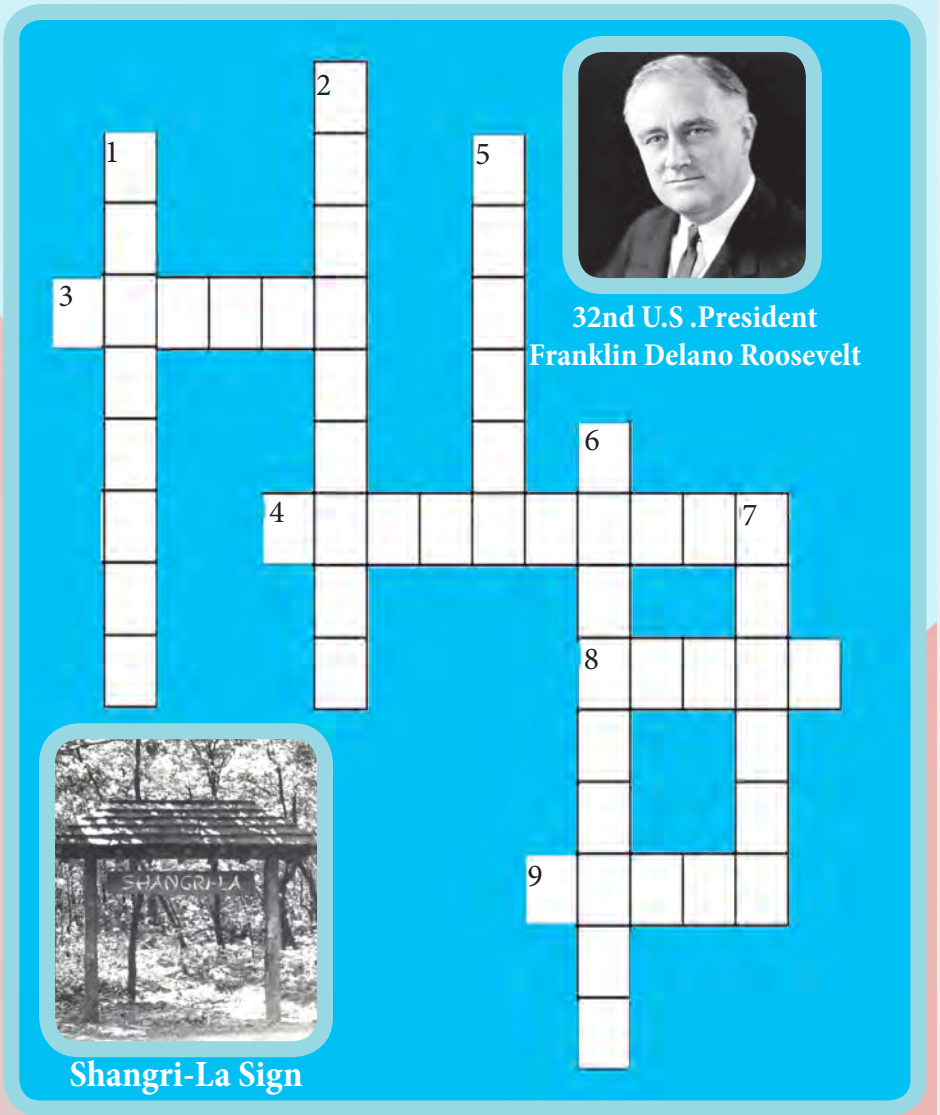
Even though President Harry Truman seldom used Shangri-La, he did not want it turned over to the State Park System. Instead, half of the land known as the Catoctin Recreational Demonstration Area was given to the State of Maryland and the other half was retained by the National Park Service.

President Dwight Eisenhower renamed the retreat "Camp David" after his father and grandson. After World War II, Eisenhower met with Nikita Khrushchev, the Soviet chairman, to work out problems between the two countries.

President Richard Nixon made many changes to the retreat. Nixon used the camp more than most presidents, both to entertain foreign dignitaries and to get away from Washington.

A historical peace summit took place during the Presidency of Jimmy Carter. Egyptian President Anwar Sadat and Israeli Prime Minister Menachem Begin were brought together, both wanting peace in the Middle East. A peace treaty between Egypt and Israel was finally signed after much debate.

President Ronald Reagan seldom brought dignitaries to the camp even though he used it more than previous presidents. He did meet with British Prime Minister Margaret Thatcher prior to talks with Soviet leaders about arms reductions.



32nd U.S .President
Franklin Delano Roosevelt

Shangri-La Sign

ACROSS:

(3) Hosted peace summit
(4) Renamed the presidential retreat "Camp David"
(8) Egyptian President during the Carter Administration
(9) Israeli Prime Minister during the Carter Administration

DOWN:

(1) British Prime Minister during the Reagan Administration
(2) British Prime Minister during World War II
(5) Made sure Shangri-La stayed in the National Park System
(6) Had Shangri-La created
(7) Wanted arms reductions with the Soviet Union

CODE BREAKING AT CAMP GREENTOP!

During World War II, Catoctin Mountain Park was closed to civilians and used by the military. Along with serving as a place for soldiers to find rest and recreation, some individuals secretly trained here to become Allied spies with the ***Office of Strategic Services*** (OSS) at both Camp Greentop and Camp Misty Mount. Many of the spies who completed their training at these camps were placed in Northern European countries to secretly spy on enemy activities.

OSS Recruits at Camp Greentop During World War II

Using the Spy Code Key on the right, match the letter with the number to decipher the message below.

KEY:

A	10
B	2
C	16
D	7
E	14
F	8
G	22
H	18
I	3
J	21
K	17
L	11
M	24
N	25
O	12
P	1
Q	19
R	9
S	20
T	6
U	5
V	26
W	13
X	4
Y	23
Z	15

20	18	10	9	14

13	18	10	6

23	12	5

18	10	26	14

11	14	10	9	25	14	7

Learning how to decipher codes was just one of many things that OSS recruits had to learn to be an ***ESPIONAGE AGENT*** (spy). Fitness training, sharpshooting, and hand-to-hand combat were just a few of the many skills that OSS recruits learned here at Catoctin Mountain Park.

Want to know more?

Using a computer, you can see declassified movies of OSS recruits training at Catoctin Mountain Park at: www.youtube.com/user/catoctinnps

The Cool Things I Learned!

Find the special words that are located in the yellow boxes of the activity pages in this Junior Ranger Book. Use them to fill in the blank spaces below.

American Indians made sharp tools by _____ rocks with stones or animal bones.

The WPA and CCC were established during the _____ _____ to create thousands of jobs for people out of work. Many of them would go on to help build the park.

Some animals use _____ to help them to hide.

Wood from the _____ _____was used to make the log cabins in the campgrounds.

From a _____of wood, colliers could make 30- 35 bushels of charcoal.

The name _____is thought to come from the Kittocton American Indian people.

The sandy material you find in streams is called _____.

Trees that drop their leaves in the fall are called _____ trees.

If you wanted to see how well you can use a map and compass, you could try one of the _____courses here in the park.

A _____ is a distinct edge, protrusion, or extension of a leaf.

Learning how to decipher codes was just one of many things that OSS recruits had to learn to be an _____ _____.

In order to have a healthy _____ animals and plants need enough food, water, shelter, and space.

A _____ is a 100 year anniversary.

To make certain we keep the forest and animals healthy in the park, always _____ you follow the park rules.

Junior Ranger Oath

As a Junior Ranger...

I pledge to do my best to protect the natural, cultural, and historical resources of our national parks. I will follow all park rules to ensure that all of my visits will be safe and enjoyable. I will continue to explore and learn about what makes national parks so special.

I will wear my Junior Ranger badge with pride and will be helpful and respectful to all people. Lastly, I will share with people all of the wonderful and special things that I have learned about Catoctin Mountain Park.

NATIONAL PARK SERVICE

This certificate is awarded to

_____

for successfully completing all requirements and activities
to become a Junior Ranger at
Catoctin Mountain Park.

_____
Park Ranger Signature

Passport Stamp