



# New River Gorge National Park and Preserve Junior Ranger



# Welcome to the Junior Ranger Program

There are over 420 National Park Service sites across America. Each park tells part of America's story. New River Gorge National Park and Preserve, Gauley River National Recreation Area, and Bluestone National Scenic River are part of this national park system.



Junior Rangers care for these special places and help others learn about this rich heritage. As a Junior Ranger you will ...

- **Explore:** Explore fantastic places in parks that make these sites treasures of America.
- **Learn:** Learn about the natural and cultural things that make these parks special places.
- **Protect:** Help protect these parks for the enjoyment of present and future generations.

Find out more about New River Gorge National Park and Preserve at [www.nps.gov/neri](http://www.nps.gov/neri) plus all National Park Service sites at [www.nps.gov](http://www.nps.gov).



QR code the this park



## Earn a Badge

Here's how you can become a Junior Ranger (earn a badge) at New River Gorge National Park and Preserve.

**Everyone:** Complete at least four green ribbon activities plus requirements for your age.



	Page		Page
<input type="checkbox"/> Leave No Trace and You	14	<input type="checkbox"/> Attend a ranger program	22
<input type="checkbox"/> Visit the Visitor Centers	16	<input type="checkbox"/> or watch the park film	
<input type="checkbox"/> Arrowhead Symbol	19	<input type="checkbox"/> Interview a ranger	22

**If you are 5 to 9 years old:**

Complete at least four red ribbon activities.

	Page
<input type="checkbox"/> Fun With Maps	3
<input type="checkbox"/> What's for Lunch	5
<input type="checkbox"/> Sounds Like	6
<input type="checkbox"/> Life Down Under	7
<input type="checkbox"/> Starry Starry Night	9
<input type="checkbox"/> Play It Safe!	12
<input type="checkbox"/> Take a Hike	15
<input type="checkbox"/> Find Your Parks	20



**If you are 10 years or older:**

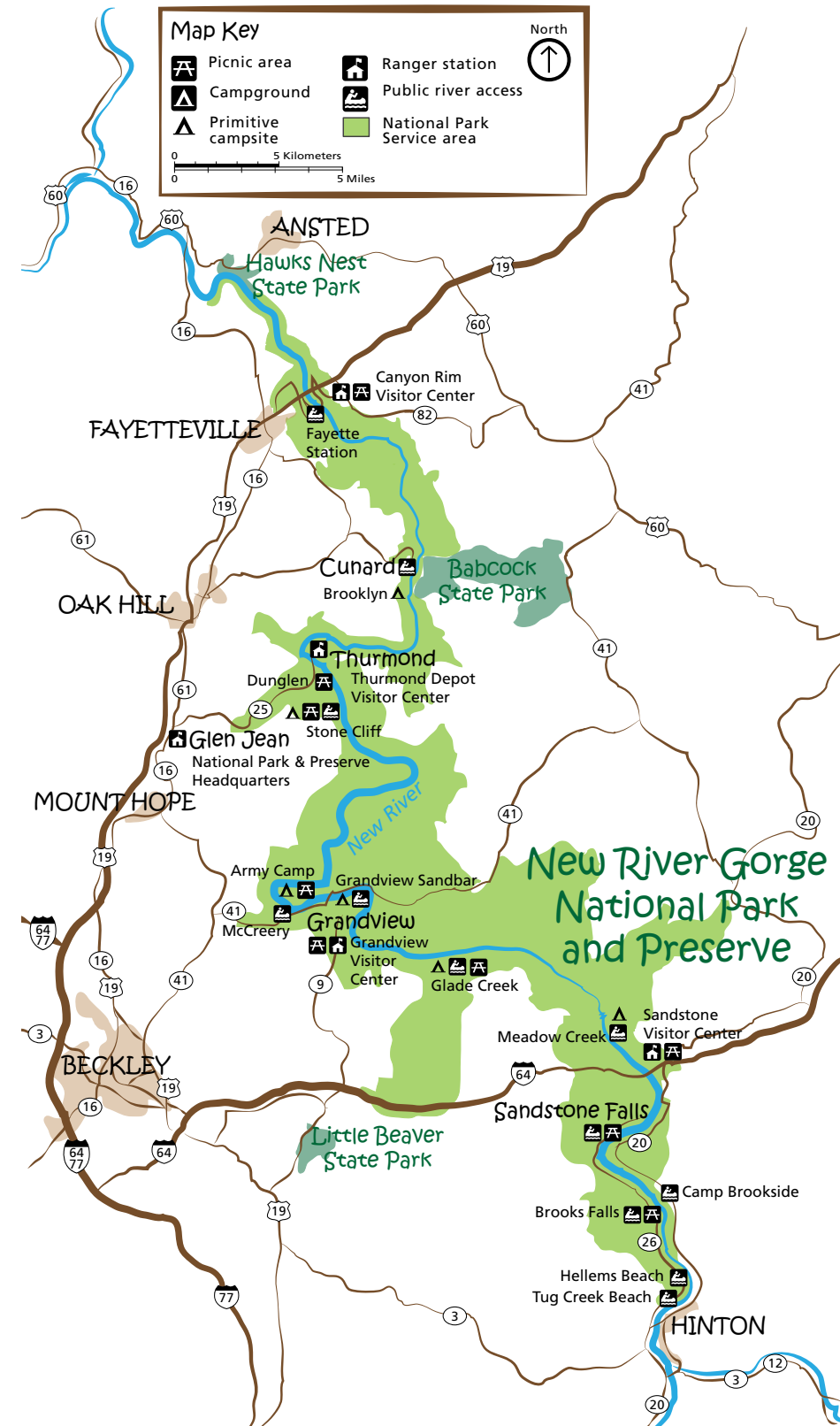
Complete at least four red ribbon and four blue ribbon activities.

	Page
<input type="checkbox"/> Leafy Green Tree Hunt	4
<input type="checkbox"/> Rockin' Geology	8
<input type="checkbox"/> Time Travel	10
<input type="checkbox"/> Coal Town Tales	11
<input type="checkbox"/> Search the Gauley	18
<input type="checkbox"/> The BLUE's Clues	18
<input type="checkbox"/> Fun on the Job	21



# Fun with Maps

Find your way around the park using a park map. Use the map below to answer these questions about New River Gorge National Park and Preserve.



- \_\_\_\_\_ Falls is a large waterfall on the New River just south of Sandstone Visitor Center.
- What are the names of two park visitor centers, the ones farthest north and south?  
\_\_\_\_\_  
and \_\_\_\_\_
- The New River flows from the bottom of the map toward the top of the map. What direction does the New River flow?  
\_\_\_\_\_
- Name two places you can have a picnic in the park.  
\_\_\_\_\_  
and \_\_\_\_\_
- Name one place where you can camp in the park.  
\_\_\_\_\_
- Name one place where boaters can access the river.  
\_\_\_\_\_



# Leafy Green Tree Hunt



There are over 1,500 types of plants that grow in the New River Gorge. Some trees are evergreen that keep their green needles and leaves year-round. Most trees are deciduous. The leaves of these types of trees change color in the autumn and drop to the forest floor as these plants prepare for the cold winter season.

Identify these common leaves below by unscrambling the letters of each tree's name.

h \_ \_ \_ \_ r \_ \_  
~~Y~~ ~~R~~ K I ~~C~~ ~~H~~ O  
 (deciduous tree)

\_ \_ \_  
 A K O  
 (deciduous tree)

r h \_ \_ o d \_ \_ d \_ \_ n  
~~D~~ O N ~~N~~ ~~H~~ E ~~D~~ R ~~O~~ O ~~R~~ D  
 (evergreen tree)

h \_ \_ \_ \_ c k \_ \_  
 M ~~C~~ O E L ~~H~~ ~~X~~  
 (evergreen tree)

bottom of needle

\_ \_ \_ l \_ \_  
 E P M A ~~X~~  
 (deciduous tree)

# What's For Lunch

Everyone has things they like to eat. Don't you? Animals have favorite foods, too.

Serve up the best, most nutritious meal for each animal below. Find each animal's favorite foods in the food menu, then put that food group number on each animal's plate.

Bear, deer, and owl illustrations © ZACHERY ZDINAK

white-tailed deer

great horned owl

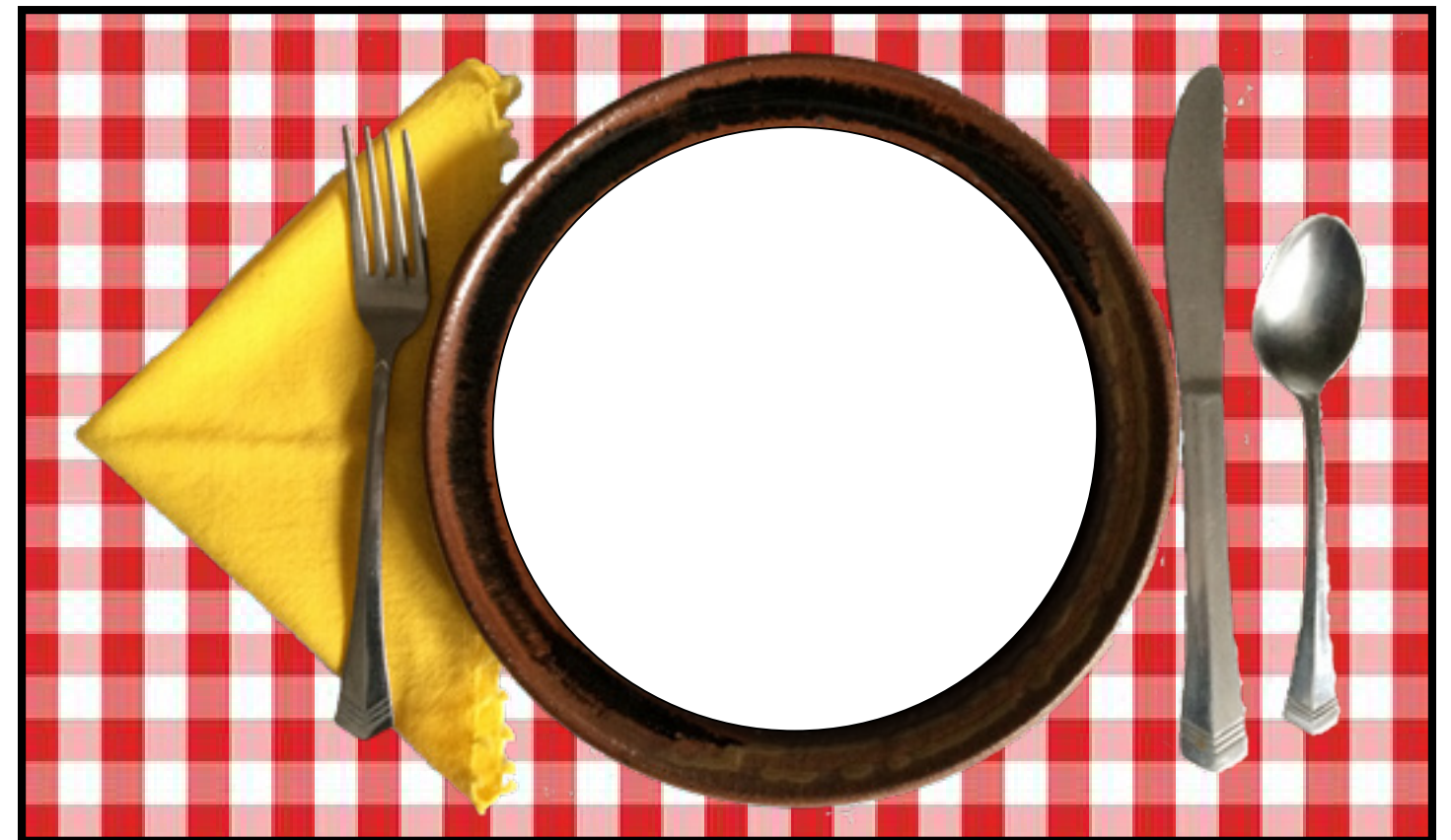
black bear

## Food Menu

- 1 mice, squirrels, & snakes
- 2 fruit, baby insects, & dead animals
- 3 acorns, fruit, & grass

## What did you have for lunch?

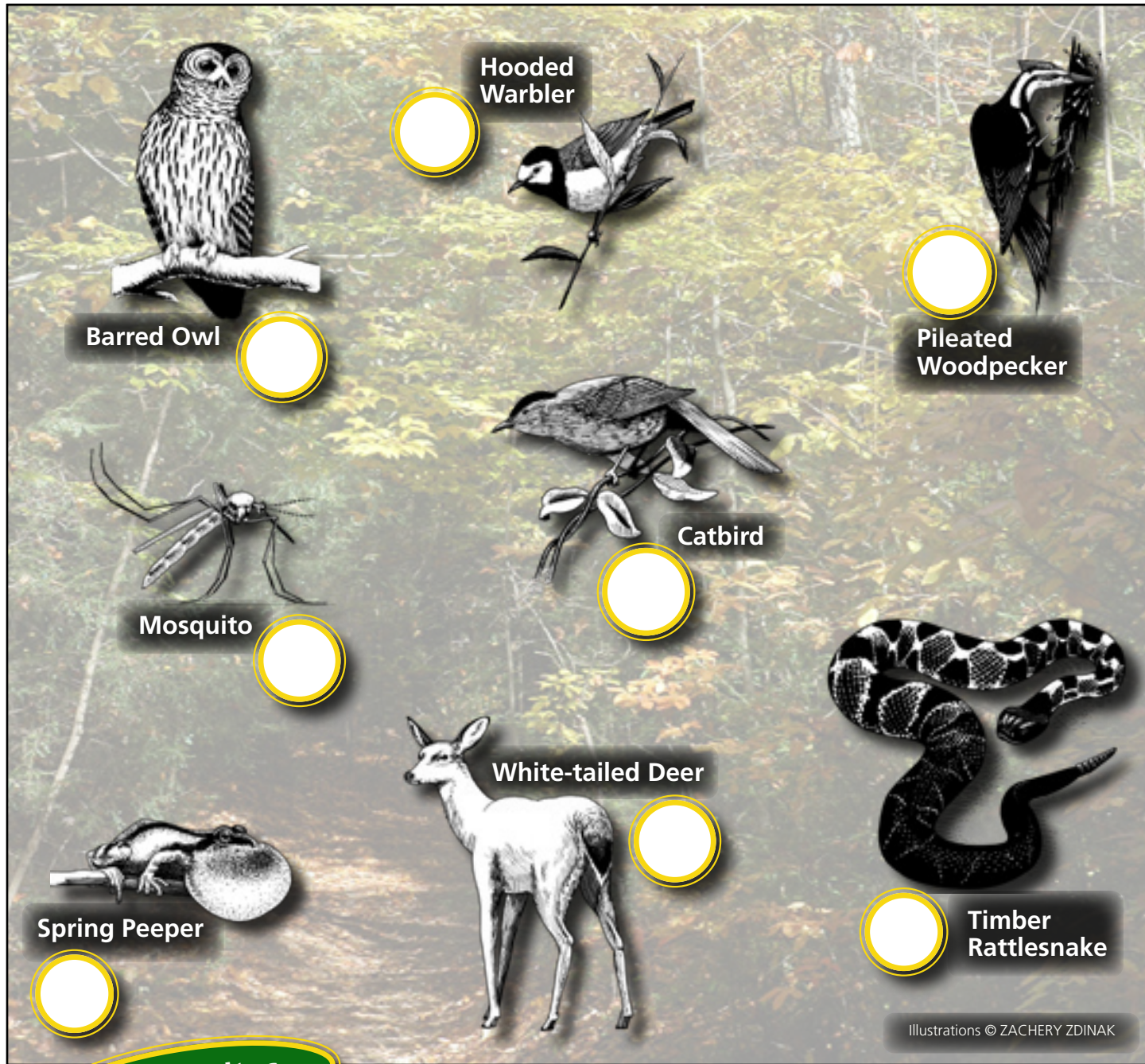
Draw a picture of a food you like to eat while on a picnic or camping on the plate below.





# Sounds Like ... a Call in the Wild

Nature is amazing in so many ways, including the sounds made by creatures in the wild. Look through the **sound bite** clues below and match the critter to its sound number.



Illustrations © ZACHERY ZDINAK

## Sound Bites

- 1** "Who, who, who cooks for you?"  
It sounds like I'm hungry in the night.
- 2** "Meow, meow"  
I sound like an animal that lives with people.
- 3** "Bzzzzzzzzzzzz"  
I'll try to whisper a secret in your ear.
- 4** "Rattle, rattle, rattle"  
I'll warn you when you're too close for my comfort.
- 5** "Peep, peep, peep"  
I say my name. My favorite season is in my name too.
- 6** "Knock, knock, knock ..."  
I work through wood to get my insect food.
- 7** "Huff"  
I'll warn my friends with an airy puff when you're near.
- 8** "A hood, a hood, a hood on me"  
Do you like my black hat?

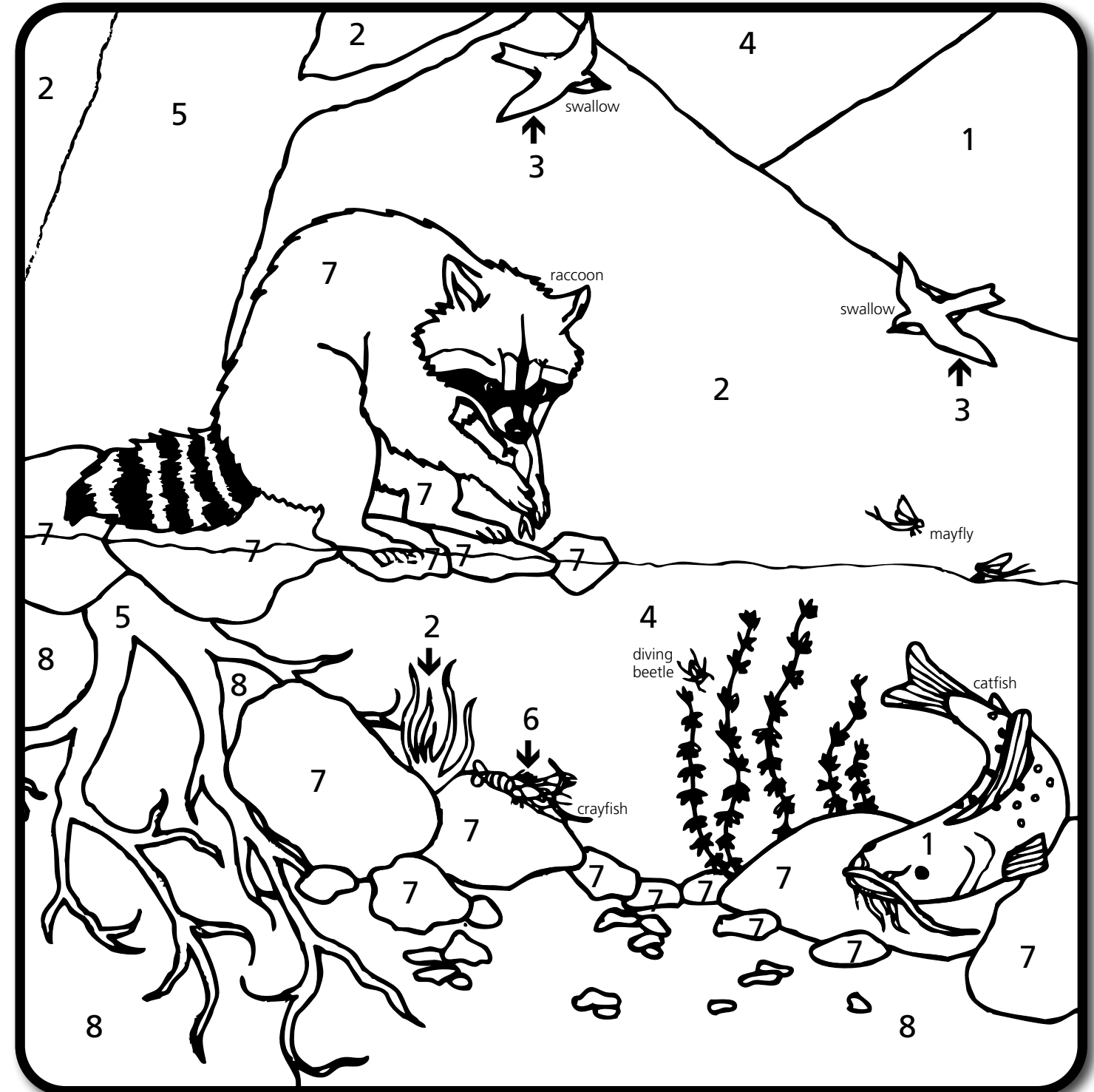
# Life Down Under

Flowing water is an important part of nature. Find it in a large river or a small stream. There is so much life to discover in the water and along the water's edge.



Follow the color-by-number code below to reveal who lives in a river habitat.

1=green 2=light green 3=blue 4=light blue 5=brown 6=orange 7=gray 8=tan or yellow



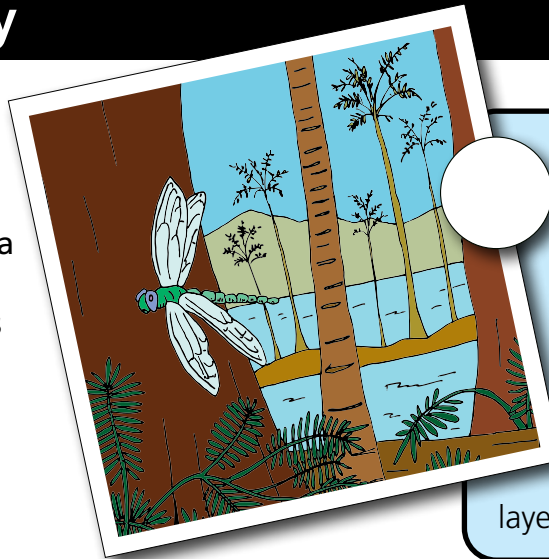


# Rockin' Geology

Don't be fooled by its name, for the New River is one of the world's older rivers. How do geologists tell the age of a river? Younger rivers usually contain rapids and waterfalls that carve deep, V-shaped gorges, while older rivers slowly meander across wide, flat floodplains. The New River has characteristics of both ages and continues to cut away at the land. This is a place of geologic change!

Put these geologic events in the order they occurred. Mark 1 as the oldest event in time and 5 as the youngest (today).

Illustrations NPS / DAVE BIERI

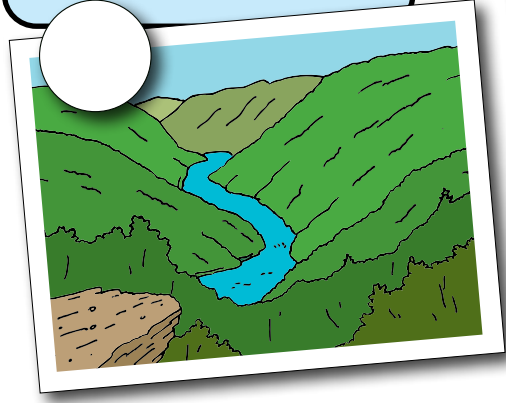


After the first mountains rose, streams flowed down the mountainsides. Water collected in the bottom lands. Rich in plants, swamps formed here. (Millions of years later, the remains of these swamps became the hard layers of coal that people use today.)

Even after the swamps formed, water still carved away the first mountains. All that sand and rock (sediment) finally covered the swamps, but water still moved here. The Teays River flowed north across the now flat bottom lands.

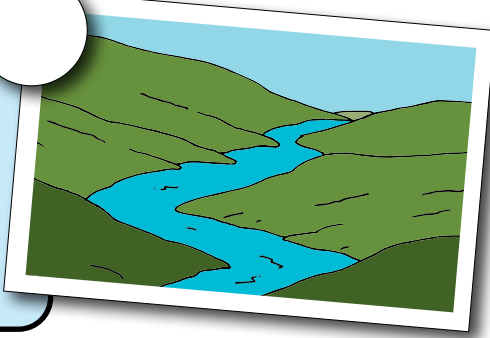


Today known as the New River, this powerful waterway continues to carve one of the largest and deepest gorges in the Appalachian Mountains.



The first Appalachian Mountains uplifted when the African and North American plates collided.

Then the mountains started to grow again, building the Appalachian Mountains we know now. This happened so slowly that the Teays River was able to cut across the emerging ridges.



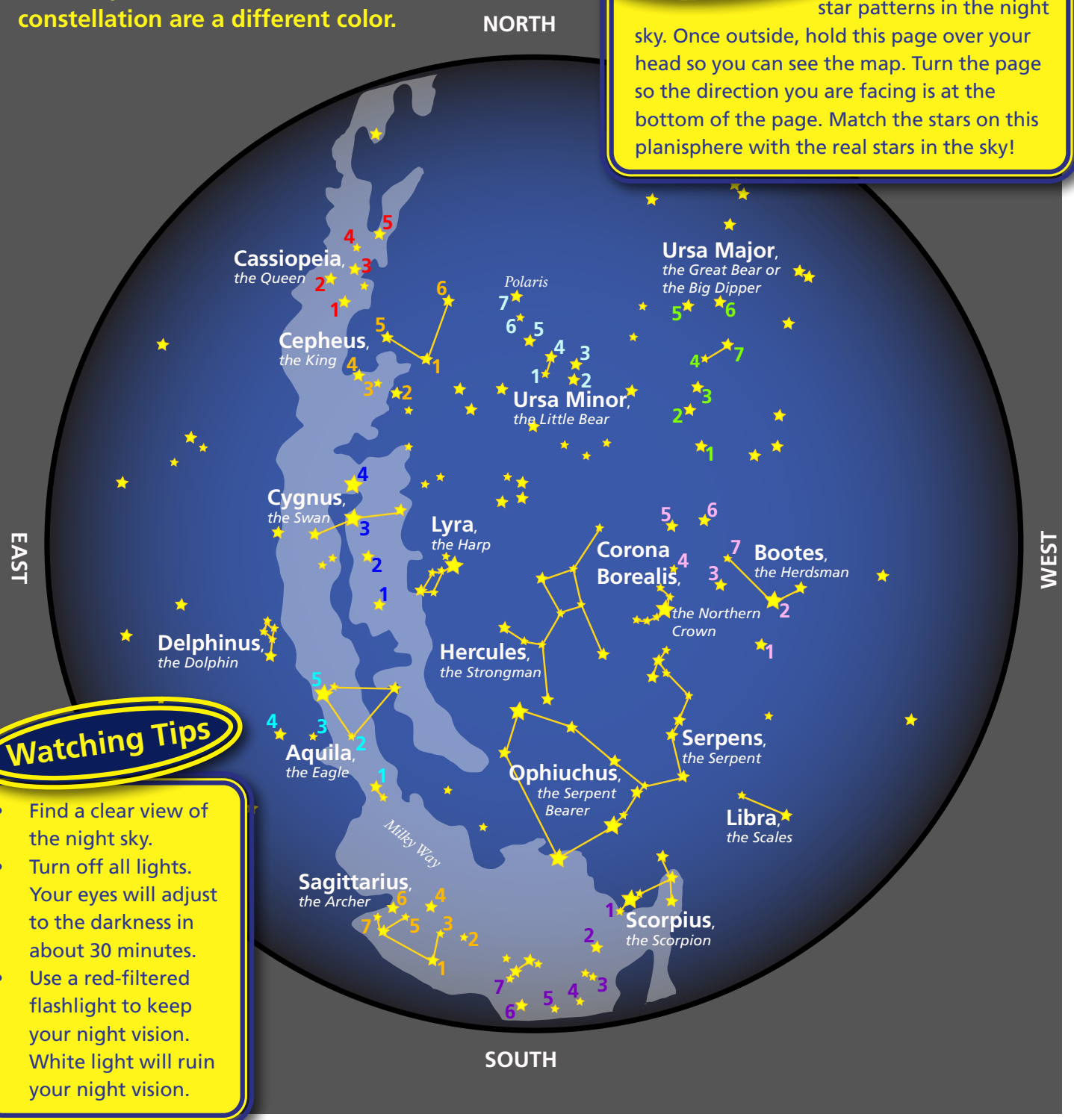
# Starry Starry Night

One of the park's best shows is the night sky. Look for patterns in the stars, called constellations. A planisphere, a star map, is a useful tool.

Connect the numbered stars below to discover common summer constellations (just like connect the dots). The numbers for each constellation are a different color.

## Summer Star Map

Use this page to see star patterns in the night sky. Once outside, hold this page over your head so you can see the map. Turn the page so the direction you are facing is at the bottom of the page. Match the stars on this planisphere with the real stars in the sky!



## Watching Tips

- Find a clear view of the night sky.
- Turn off all lights. Your eyes will adjust to the darkness in about 30 minutes.
- Use a red-filtered flashlight to keep your night vision. White light will ruin your night vision.



# Time Travel



How people traveled through the New River Gorge has changed over time. The area's earliest people traveled by foot or on horseback, but machines have aided our locomotion for over 100 years now.

Figuring out how long it takes to get from one place to another can be useful as you plan your next park adventure. Use the equations below to see if you can calculate the average time it took these New River Gorge travelers of the past to get from one place to another.

**1755 Walk Home Through Wilderness**  
Frontierswoman Mary Draper Ingles escaped from Shawnee captivity and made her way home by following the major rivers. How many miles a day did Mary likely walk?  
 $400 \text{ miles} \div 30 \text{ days} = \underline{\hspace{2cm}}$  miles per day

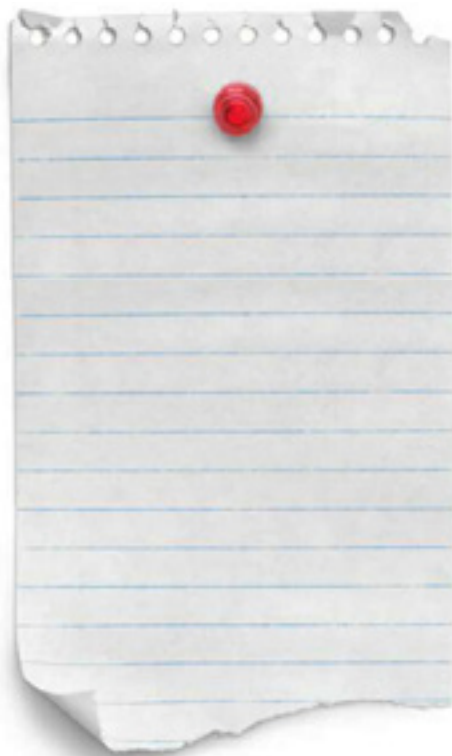
**1837 Ride a Stagecoach**  
How long did it take to ride across the wild New River Gorge area in a stagecoach? (Travel time between White Sulphur Springs and Charleston along the Midland Trail / James River & Kanawha Turnpike.)  
 $115 \text{ miles} \div 5 \text{ miles per day} = \underline{\hspace{2cm}}$  travel days

**1925 Drive Fayette Station Road**  
How long did it take to drive across the New River Gorge in a Model-T Ford?  
 $8 \text{ miles} \div 10 \text{ mph} = \underline{\hspace{2cm}}$  hour X  
 $60 \text{ minutes per hour} = \underline{\hspace{2cm}}$  minutes

**1947 Ride a Passenger Train**  
How long did it take to ride a passenger train from Thurmond to Hinton? (This time does not include the 30 minute stop at the depot in Prince.)  
 $34 \text{ miles} \div \text{average train speed of } 32 \text{ mph} = \underline{\hspace{2cm}}$  hours

**1980 Raft the Lower New River**  
How long did it take to raft the river from Thurmond to Fayette Station in the spring? (This is an average time, as water speeds vary with water levels.)  
 $15 \text{ miles} \div 3 \text{ mph} = \underline{\hspace{2cm}}$  hours

Note Pad for Your Calculations  
(It's OK to use a calculator if you want.)



## Bonus Present Day

### Cross the New River Gorge Bridge in a Car

Speed limit on the New River Gorge Bridge (WV Route 19) is 65 mile per hour, which is equal to 95 feet per second. How long does it take to drive across the New River Gorge Bridge in a modern car?

$$\frac{3030 \text{ feet}}{1} * \frac{1 \text{ second}}{95 \text{ feet}} = \underline{\hspace{2cm}} \text{ seconds}$$

# Coal Town Tales



Coal was "king" in the New River Gorge for over eighty years. People came from near and far to work in the coal mines and build area communities around 1900.

Use the **Decoder Key** below to discover more about the park's rich coal mining history.



For many years the 14 5 23 18 9 22 5 18 7 15 18 7 5 was a major supplier of the primary 5 14 5 18 7 25 source for the industrial world, 3 15 1 12. With the completion of the 3 8 5 19 1 16 5 1 11 5 & 15 8 9 15 Railway in 1873, over sixty 3 15 1 12 20 15 23 14 19 sprang up in the New River Gorge, including 11 1 25 13 15 15 18 19 5 23 5 12 12 and 14 21 20 20 1 12 12 2 21 18 7. The heyday of coal mining along the New River lasted half a 3 5 14 20 21 18 25 and provided 10 15 2 19 for thousands of 1 13 5 18 9 3 1 14 19 and 9 13 13 9 7 18 1 14 20 19.

## Decoder Key

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



# Play It Safe!

Exploring parks is exciting! To keep the fun in these adventures it is smart to think safety first. Smart choices ensure outings remain enjoyable and lessen impacts on natural and historic resources protected at the site.

Pick out the smartest safety tip for each activity below by circling the best choice for each activity. There is only one safe choice listed per topic; the other actions should not be taken.



## Railroad Tracks & Trains

- A. It's OK to walk on the railroad tracks if no train is coming down the tracks.
- B. You'll always hear a train coming down the tracks, so there should be time to get off the line.
- C. Never walk on or near the railroad tracks. This is private property, plus you can't always hear trains coming 'round the bend.

## Wildlife Encounters

- A. It's OK to touch and feed wildlife if they are gentle animals.
- B. If you see a baby animal all alone, it has likely been abandoned by its parents. Take the young creature home to care for it yourself.
- C. Touching or feeding wildlife can be dangerous and frightening — for the animal. It's best to leave animals alone and watch them from a distance.

## Near the Edge

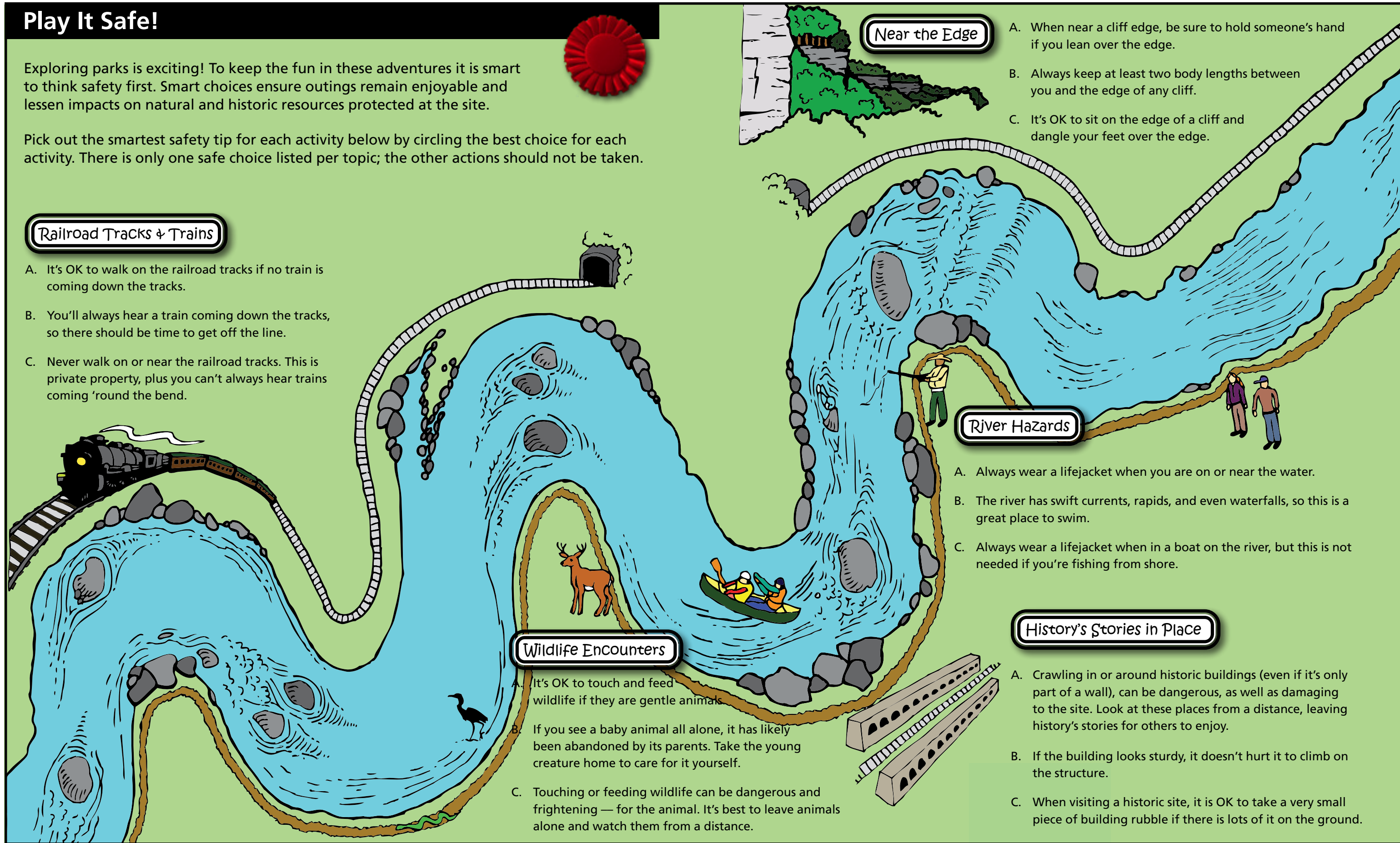
- A. When near a cliff edge, be sure to hold someone's hand if you lean over the edge.
- B. Always keep at least two body lengths between you and the edge of any cliff.
- C. It's OK to sit on the edge of a cliff and dangle your feet over the edge.

## River Hazards

- A. Always wear a lifejacket when you are on or near the water.
- B. The river has swift currents, rapids, and even waterfalls, so this is a great place to swim.
- C. Always wear a lifejacket when in a boat on the river, but this is not needed if you're fishing from shore.

## History's Stories in Place

- A. Crawling in or around historic buildings (even if it's only part of a wall), can be dangerous, as well as damaging to the site. Look at these places from a distance, leaving history's stories for others to enjoy.
- B. If the building looks sturdy, it doesn't hurt it to climb on the structure.
- C. When visiting a historic site, it is OK to take a very small piece of building rubble if there is lots of it on the ground.



# Leave No Trace and You



We each visit national parks for different reasons. People hike, boat, camp, explore nature and history, and more in these parks. With so much to see and do at each site, all of us can take easy steps to help care for these special places by practicing Leave No Trace Outdoor Ethics.



Take the smartest outdoor ethics action for each activity example below.

These seven guiding principles of outdoor ethics can help us take wise actions when playing outdoors.

- Know Before You Go (Plan Ahead and Prepare)
- Choose the Right Path (Travel and Camp on Durable Surfaces)
- Trash Your Trash (Dispose of Waste Properly)
- Leave What You Find
- Be Careful With Fire (Minimize Campfire Impacts)
- Respect Wildlife
- Be Kind to Other Visitors (Be Considerate of Other Visitors)



**Trash Your Trash**  
(Dispose of Waste Properly)

You and your family have a picnic in the park, but there isn't a trash can at that site. What is the best thing to do with you picnic food scraps and trash?

\_\_\_\_\_

\_\_\_\_\_

## Leave What You Find

You see a beautiful wildflower along a park trail. Circle ALL the best ways to share this plant with others, ways to "take it with you" without really taking the wildflower away from its natural habitat.



Take a photo



Pick the flower



Draw a picture



Take others to it

## Respect Wildlife

You see a fawn (baby deer) in the park. No adult deer seems to be around. What should you do? Check the best choice for this young animal.

- Take the fawn home.
- Leave the fawn alone.
- Feed the fawn and hold it until the mother deer comes back.



# Take a Hike

Choose one of the trails in the park to hike with your family. Keep track of cool things you see along the way, plus draw a picture of one of nature's wonders. Have a great hike!

Trail Name: \_\_\_\_\_



*Discovery Journal*

Make your hike a discovery adventure. Check off the things you see on your walk, plus add more details if you like.

- historic building \_\_\_\_\_
- bird \_\_\_\_\_
- animal \_\_\_\_\_
- insect \_\_\_\_\_
- tree \_\_\_\_\_
- flower \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

*Nature Sketchbook*

Draw a picture of a plant or animal that you saw on your hike.



# Visit the Visitor Centers

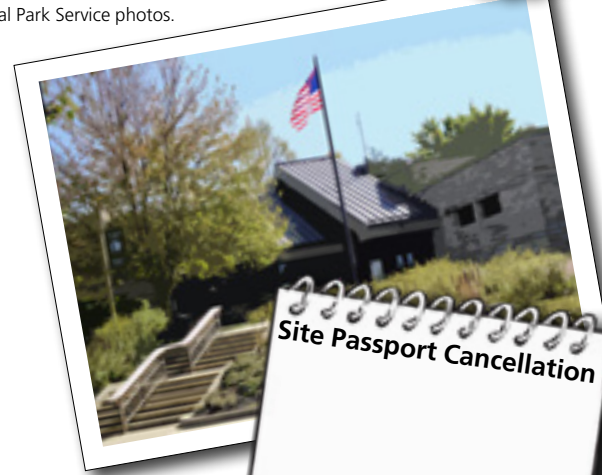
Stop by at least one visitor center in New River Gorge National Park and Preserve. Explore the area and answer that site's questions below. Get the passport cancellation stamp too.

National Park Service photos.

## Canyon Rim Visitor Center

(open year-round) \*See exhibits inside the visitor center.

- List two pieces of equipment used for a safe river trip.
  - A) \_\_\_\_\_
  - B) \_\_\_\_\_
- The flat-topped plateau of the New River Gorge is part of what eastern U.S. mountain range? (circle one)
  - A) Appalachian
  - B) Sierra-Nevada
  - C) Rocky
  - D) Cascade



## Thurmond Depot Visitor Center

(open summer) \*See inside and outside exhibits near the visitor center.

- Thurmond depot was once one of the busiest passenger train stops in the New River Gorge. In the booming year of 1910, this Chesapeake & Ohio (C & O) station served how many passengers? (circle one)
  - A) 21,000
  - B) 75,000
  - C) 15,000
  - D) 120,000
- The C & O Railway carried freight and passenger trains. Some people used the tracks in secret, like hobos. Draw a line to match the codes left by hobos to send messages to one another:



Hit the Road Quick    Beware of Dog    Freshwater Safe Camp    Police    Good Place to Catch a Train    Kind Lady



## Sandstone Visitor Center

(open seasonally) \*See exhibits inside the visitor center.

- Go to **You Are Here** on the visitor center floor map. The Bluestone River runs through a nearby national park, Bluestone National Scenic River. Which direction is the Bluestone River from **You Are Here**? (circle one)
  - A) north
  - B) east
  - C) south
  - D) northwest
- Each of us can help protect our watersheds by being careful with how much water we use. How much water would a person waste if they left the faucet running while brushing their teeth? (circle one)
  - A) 3 gallons
  - B) 1 gallon
  - C) 5 gallons
  - D) 10 gallons
- Many people have made these mountains their home over time. Who were the earliest people to live here? (circle one)
  - A) pilgrims
  - B) Italian immigrants
  - C) American Indians
  - D) Irish immigrants



## Grandview Visitor Center

(open summer) \*See outside exhibits near the visitor center.

- The eastern hemlock tree is facing challenges throughout the region. This evergreen tree is being attacked by invading insects, a type of aphid. What invasive insect is killing hemlock trees in the New River Gorge? (circle one)
  - A) woolly adelgid
  - B) emerald ash borer
  - C) Asian longhorned beetle
  - D) gypsy moth
- Great and catawba rhododendrons grow at Grandview. These large shrubs have showy blooms in the spring and early summer. Great rhododendron is the state flower of West Virginia. (circle one)



True or False



# Search the Gauley

Gauley River National Recreation Area is a nearby National Park Service site. The Gauley River is well known as one of America's most challenging rivers for whitewater boating, with a six week season each autumn. Find exciting elements of a local whitewater adventure in this word search.



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

### Find names of river rapids:

- Insignificant
- Iron Ring
- Koontz Flume
- Lost Paddle
- Pillow Rock
- Sweets Falls

### Find this river gear:

- helmet
- lifejacket
- kayak
- paddle
- raft
- throw bag

### Find these river features:

- current
- eddy
- put-in
- rapid
- rock
- take-out

**BONUS:** find this river's name

# The BLUE's Clues

Bluestone National Scenic River is another nearby National Park Service site. The Bluestone River Gorge is home to many different animals. Each critter may leave a clue to their presence, like tracks, scat (poop), nest, and more. Draw a line to connect the animal to its tracks.



Mink, opossum, and raccoon illustrations © ZACHERY ZDINAK

**Beaver**

**TIP:** big back feet are webbed for swimming

**Mink**

**TIP:** little webbing on all four feet for swimming

**Opossum**

**TIP:** hand-like with opposable thumbs, just like people

**Raccoon**

**TIP:** toes bulbous on the ends

# Arrowhead: National Park Service Symbol

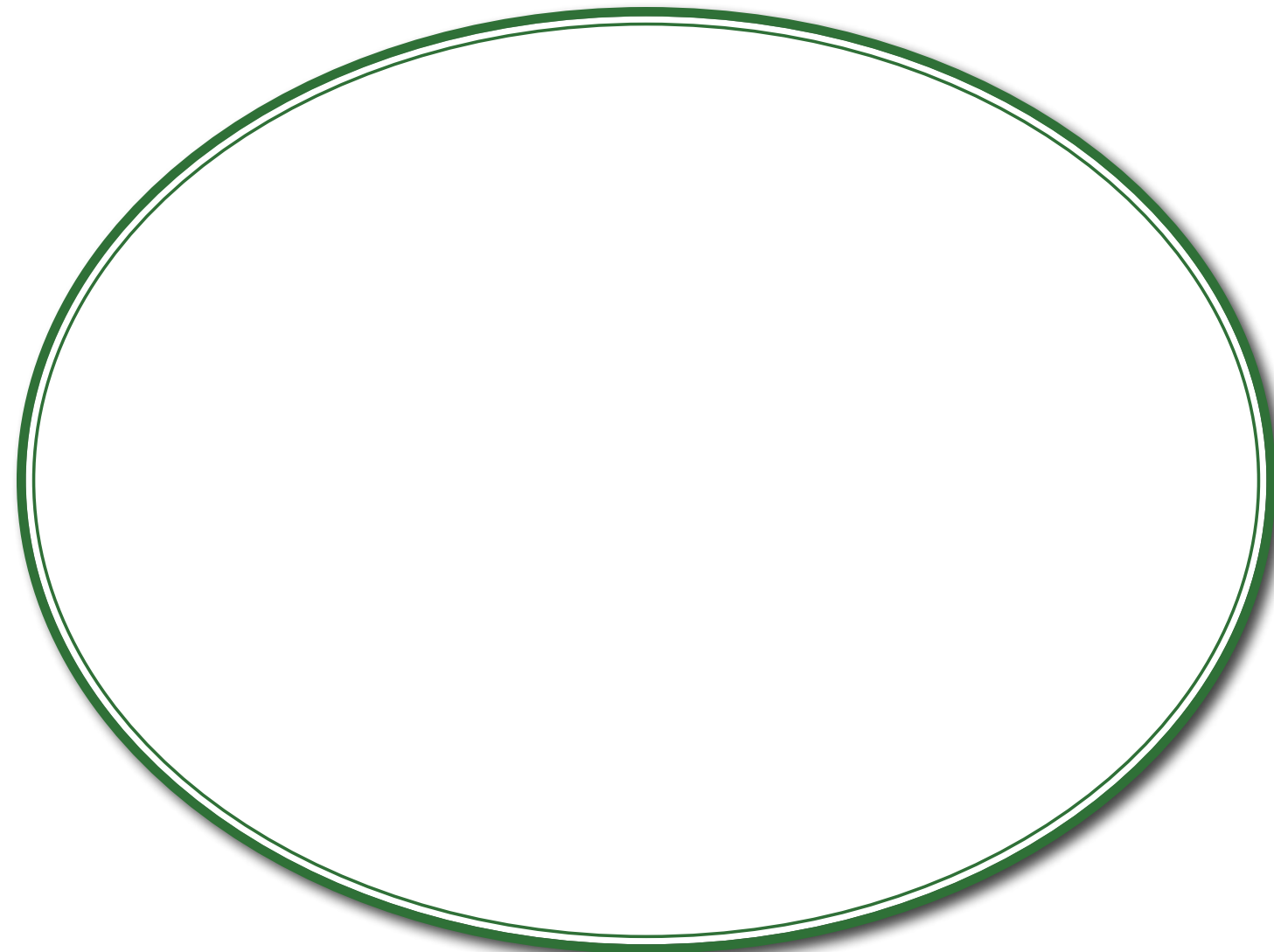


Wherever you see this symbol in America, know that you are in a special place, a National Park Service site. This symbol shows what is preserved in national parks. See the parts of the arrowhead below.



### My New River Gorge National Park and Preserve Symbol:

What things are protected in New River Gorge National Park and Preserve? What are some of your favorite things to do in this park? What are your favorite parts of this park? Think about this and design a symbol for this National Park Service site, something that would let others know what is special about this park.





# Find Your Parks



National parks protect America's scenery, natural and historic objects, and wildlife. These parks are places to have fun, yet protect these resources so people of the future can enjoy these special places too. There are over 420 National Park Service sites in America.

Use the clues below to see what is special about these parks. Put the park number in its clue box.

NPS / DAVE BIERI, and © BILL DOWLING



## Park Clues:

What park has North America's highest mountain? It has grizzly bears and caribou too.

What park has a statue that welcomed immigrants to America? It was a gift from the people of France.

What park was home to the Ancestral Pueblo people? They built and lived in cliffside houses.

What park is home to the world's biggest trees? Some trees measure over 100 feet in circumference at the base.

What park celebrates life on the country's eastern shore? It has lighthouses, sea turtles, water birds, and more.

What park is where one of the largest battles of the Civil War took place? Lincoln gave a famous "address" here.

What park has America's deepest canyon? It is cut by the Colorado River.

# Fun on the Job



Park staff at New River Gorge National Park and Preserve have different jobs. They work together to preserve park resources for present and future generations.

Draw a line to connect the National Park Service employee to their job.

**Natural Resource Management**: Performs the administrative duties of running a park.

**Administration**: Educates visitors about park resources through guided hikes, talks, school programs, publications, and displays.

**Fire Management**: Enforces regulations and ensures visitor safety by administering first-aid and handling search and rescue operations.

**Interpretation**: Identifies and studies the park's natural resources and determines ways to best protect these resources.

**Cultural Resource Management**: Patrols the river, ensuring that park visitors are being safe and assist boaters who need help.

**Visitor Protection**: Fights wildfires in the park and manages prescribed burns.

**Maintenance**: Maintains the park's structures, roads, and trails, and keeps the park clean.

**River Patrol**: Studies the park's people history and determines ways to best protect cultural sites.



## Attend a Ranger Program or Watch a Park Video

Attend a ranger-led program or watch a park video. Write down three things that you learned. If a program is not scheduled during the time of your visit, watch the park movie at Canyon Rim or Sandstone Visitor Centers. You could also watch a video on the park's website or Facebook page. ([www.nps.gov/neri](http://www.nps.gov/neri) or [www.facebook.com/newrivergorgenps](http://www.facebook.com/newrivergorgenps))



Name of the program/video: \_\_\_\_\_

Three things I learned during this program:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

## Interview a Ranger

Talk with a park ranger. Ask questions about their job, their school background, or the park. Question and answers can be written below or asked orally for this interview.



Name of ranger: \_\_\_\_\_ Date: \_\_\_\_\_

Question #1: \_\_\_\_\_

Ranger answer: \_\_\_\_\_

Question #2: \_\_\_\_\_

Ranger answer: \_\_\_\_\_

Question #3: \_\_\_\_\_

Ranger answer: \_\_\_\_\_

# Junior Ranger

New River Gorge National Park and Preserve

This certifies that

\_\_\_\_\_ has successfully completed all the requirements to become a New River Gorge National Park and Preserve Junior Ranger and pledges to protect all national parks for future generations.

\_\_\_\_\_  
Park Ranger signature

\_\_\_\_\_  
Date



### Junior Ranger Pledge

As a Junior Ranger, I promise to:

- Learn about parks and share what I've learned with others.
- Help keep parks clean.
- Leave all natural and historic things as I find them.



Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Place  
Stamps  
Here



**National Park Service  
U.S. Department of the Interior**

**New River Gorge National Park and Preserve  
P.O. Box 246  
Glen Jean, WV 25846**