

Rock Creek Park

National Park Service
U.S. Department of the Interior



Advanced Junior Ranger Book



This book belongs to: _____



EXPERIENCE YOUR AMERICA

Welcome to Rock Creek Park Become a Junior Ranger!



Welcome to Rock Creek Park. We're glad you're here!

Rock Creek Park is one of the oldest and largest urban nature parks in the U.S. National Park System. As rangers, it's our job to preserve and protect the many important natural and cultural resources in the park. But we need help, and that's where you come in! This book is especially designed for visitors 9 to 12 years of age, but anyone with a deep appreciation for Rock Creek Park is encouraged to participate as well.



To become an official Junior Ranger for Rock Creek Park, you'll need to complete the following:

1. Complete pages three and ten.
2. Choose additional activities from pages four to 17. If you are nine or 10 years old, complete at least seven of these pages. If you are eleven or older, complete at least eight pages.
3. Read, understand, and sign the Junior Ranger Pledge on page 18.



Dear Parents and Guardians,

This book was designed with 4 main objectives:

1. To introduce young visitors to the National Park Service and its mission.
2. To encourage them to explore the many offerings of Rock Creek Park.
3. To promote protection and stewardship of park resources.
4. To help them make personal connections with the park.

We also encourage interaction between children, families and park staff. We're here to make sure that you get the most from your visit to Rock Creek Park. It's our pleasure to answer any questions you have, and suggest activities that will enhance your experience. Let us know how we can help!

From,
The Park Rangers



Cover photo: Junior Ranger campers during Rock Creek Park's Like to Hike Camp in 2013.

“The National Park Service”

National Park Service Mission



“The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations.”

This activity book is laid out with these ideas in mind. Each section will explore one of the concepts listed above.

What does the National Park Service Mission mean to you?

Now it's your turn to learn more about Rock Creek Park and how it relates to the mission of the National Park Service. Are you ready?!

"...preserves unimpaired..."

Leave No Trace



Leave No Trace is a code of outdoor ethics designed to help park visitors make smart choices and to help uphold the tenets of the NPS mission statement. Using the guide on the lower left side of this page, see if you can decode the five basic principles of the Leave No Trace philosophy.

- A ☉
- B ☽
- C ♎
- D ☰
- E ♋
- F ⚔
- G ♉
- H ☵
- I ⚖
- J er
- K &
- L ●
- M ○
- N ■
- O □
- P ◻
- Q ◻
- R ◻
- S ◆
- T ◆
- U ◆
- V ❖
- W ◆
- X ☒
- Y ☒
- Z ☿

☐●☉■ ☉☿♋☉☽ ☉■☽ ☐☐♋☐☉☐♋

-
- Know the regulations for the area you'll visit
 - Prepare for weather, hazards or emergencies you may encounter

☽⚔◆☐☐◆♋ ☐⚔ ◆☉◆♋ ☐☐☐☐♋☐●☒

-
- Inspect your site for litter
 - Pack out all leftover food and trash

●♋☉❖♋ ◆☿☉◆ ☒☐◆ ⚔⚖■☽

-
- Examine, but do not touch, cultural or historic artifacts
 - Do not disturb rocks, plants or other natural objects

☐♋◆☐♋♎◆ ◆⚖●☽●⚖⚔♋

-
- Observe animals from a distance
 - Do not feed any living creature

☽♋ ♎☐■◆⚖☽♋☉◆♋

-
- Respect other visitors and protect the quality of their experience
 - Be courteous; yield to other users on the trail

"...preserves unimpaired..."

Litter Removal



Here's an easy but very important activity! To complete this activity, all you have to do is pick up litter! Your task is to pick up at least five pieces of litter in Rock Creek Park. Then, after placing the items in a trash can (or recycling bin, if you picked up an aluminum can or plastic bottle), think about what you find, and answer the questions at the bottom of the page. Below, you'll find some trashy facts about litter that might help you.

FACTS ABOUT LITTER...

- Every year, volunteers in Rock Creek Park spend thousands of hours removing over 10 tons of litter.
- Trash that falls down storm drains in our watershed eventually ends up in Rock Creek.
- Any garbage in Rock Creek will flow into the Potomac River, then the Chesapeake Bay and eventually the Atlantic Ocean.
- It could take up to 450 years for a plastic bottle to decompose.
- Cigarette butts are the most often littered item in the world; 4.5 trillion are discarded annually.
- There is a floating mass of garbage in the Pacific Ocean, called the Great Pacific Garbage Patch, made up of an estimated 10 million tons of garbage. This massive patch of garbage is threatening national parks of the Hawaiian Islands and elsewhere.

What type of litter did you find?

Where do you think it came from?

Which of the items that you found can be recycled?

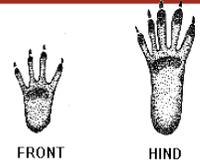
Why is recycling important?

"...the natural..."
Habitats

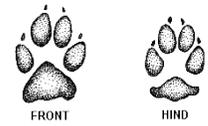


Rock Creek Park includes many different habitats. Using the main exhibit room, you can find examples of animals in their habitats. Using your knowledge of habitats, along with our displays, can you match each animal to its habitat? How about to its tracks? (Hint: there is an "Animal Tracks" binder in the Discovery Room).

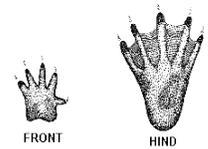
Opossum



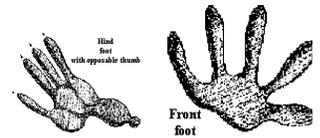
Fox



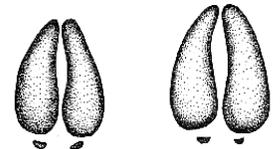
Raccoon



Squirrel



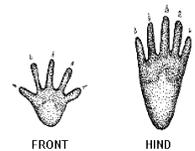
Deer



Coyote



Beaver



Meadow



Creek



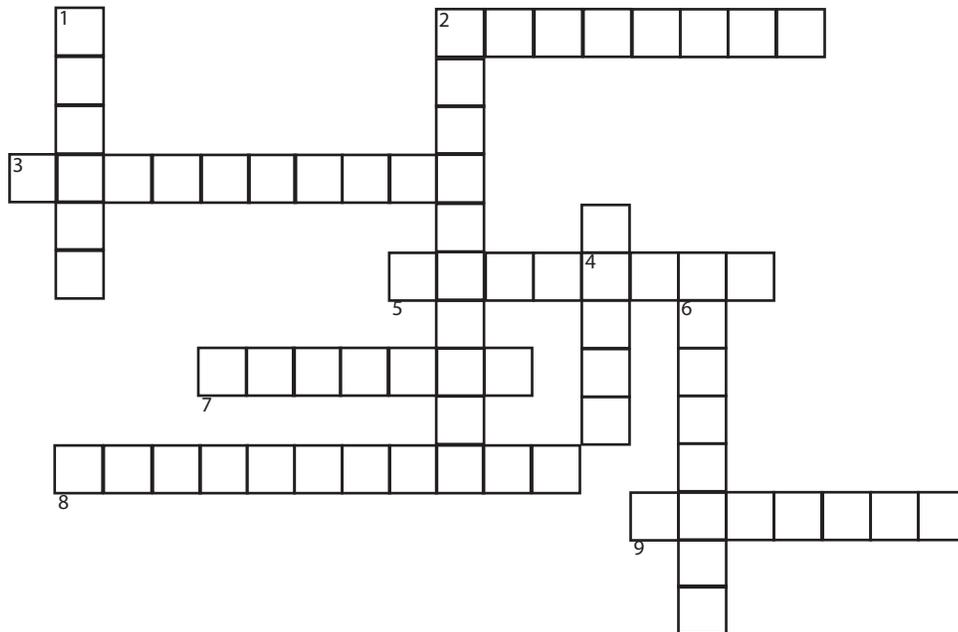
Forest

"...the natural..."

The Watershed



A watershed is an important part of any ecosystem. In the Nature Center, downstairs, there is an exhibit that will tell you more about Rock Creek's watershed. Using the information in the display (and the word bank provided), complete the crossword puzzle below.



Across:

2. Rock Creek's watershed begins in the _____ mountains.
3. Pavement cannot filter out _____.
5. What happens _____ affects everything below.
7. Rock Creek flows into the _____ River.
8. _____ can pollute the watershed.
9. The watershed begins in small _____.

Down:

1. Water that flows into the watershed is called _____.
2. The Potomac River flows into the _____ Bay.
4. A watershed is all the land and streams that _____ into a larger creek or river.
6. Ultimately, the water in Rock Creek's watershed flows into the _____ Ocean.

WORD BANK

- ATLANTIC
- CATOCTIN
- CHESAPEAKE
- DRAIN
- FERTILIZERS
- POLLUTANTS
- POTOMAC
- RUNOFF
- STREAMS
- UPSTREAM

"...and cultural resources..."

Old Stone House



Located in the busy Georgetown neighborhood, Old Stone House is actually the oldest building in all of Washington, DC. Visit the historic house, explore it, and then answer the following questions.

Compared to your own home or apartment, list five things that are different about Old Stone House. How are they different?

Try your hand at one of the colonial childrens' games. Which one is your favorite?

Would you enjoy being a kid two hundred years ago at Old Stone House? Why or why not?



Old Stone House around 1960.

"...and cultural resources..."

Fort DeRussy



Did you know that army engineers designed a fort on a hilltop above Rock Creek to help defend Washington, D.C. from Confederate troops during the Civil War? Take a hike over to Fort DeRussy (ask for directions at the Nature Center front desk) and explore the earthen (dirt) fort. Can you locate the dry moat, parapet, and gun magazine (see definitions below)? After exploring, just like an army engineer does, draw Fort DeRussy. You may choose to draw the fort the way it looks today or the way it would have looked during the Civil War. Either way, be sure and include the parapet, dry moat, and gun magazine. Be creative and feel free to include trees, a flag, soldiers, soldier's camp, etc.



Gun Magazine - a thickly walled dirt room/mound in the middle of the fort.

Parapet - the fort's wall, or perimeter.

Dry moat - a manmade ditch located just below and outside the parapet.

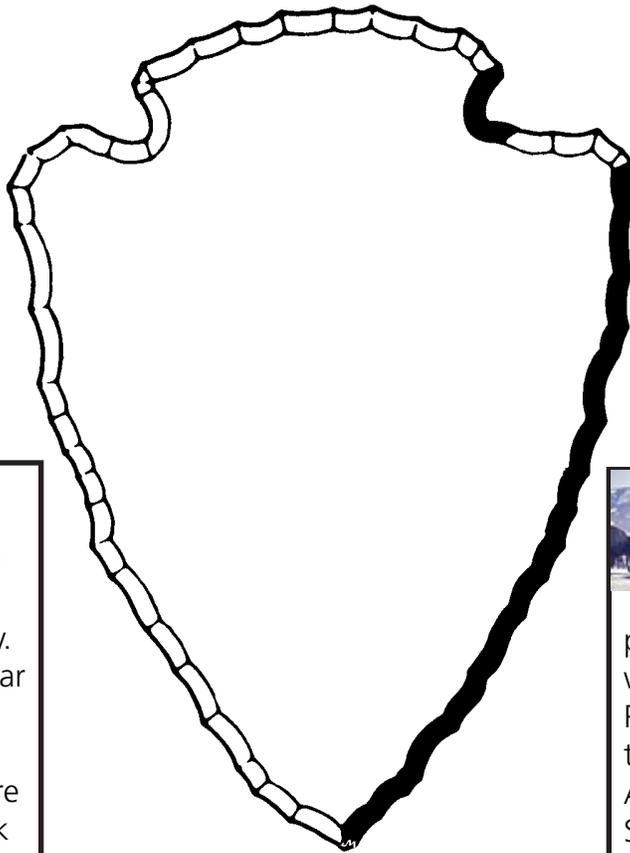
Abatis - a line of sharp tree branches located just outside the the dry moat.

"...and values of the national park system..."

The Arrowhead



The National Park Service logo, **the Arrowhead**, tells you just about everything you need to know about the ideals that park rangers and junior rangers strive to meet each and every day. The arrowhead is found in many places of the park, including on every page of this booklet! Read about what each symbol means below and then draw your own representation of the goals of the National Park System. It can match ours, or you can let your imagination run wild!



The **arrowhead** is the symbol representing cultural heritage and history. American Indians made spear and arrow points like these out of rock to hunt animals for food. You can learn more at Mesa Verde National Park in Colorado and other parks.



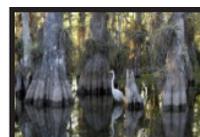
The **bison** represents wildlife. All national parks protect at least some wildlife. Yellowstone National Park in Wyoming protects the American bison while Assateague Island National Seashore in Maryland protects its famous wild ponies.



The giant **sequoia tree** represents plants protected in national parks. Sequoia National Park of course is home to the sequoia redwood, while Colorado National Monument includes various species of cactus.



The **mountain** represents all scenery which is protected and enjoyed by visitors. Denali National Park in Alaska is home to Mt. McKinley, the highest mountain in North America. When it is not clouded over, visitors get a great view of it!



The **lake** represents water, including rivers, lakes, and parts of the ocean, that are protected in national parks. South Carolina's Congaree National Park protects a seasonal mangrove swamp, while DC's Rock Creek Park is home to its namesake creek.

"...and values of the national park system..."

Water-Wise Gardens & Sustainability



Our Nature Center is home to an exciting outdoor space: a Water-Wise Garden. Not only is the garden beautiful during the summer months, but it was designed to make the best use of our natural resources, such as water and soil. Take a walk through the garden, read the garden signs and posters outside, and then think about and answer the following questions.

Why do you think that a water-wise garden is a good idea?

How does a rain barrel work?

Why are pervious pavers good for a garden? ('Pervious' means that something can flow through it)

Why is milkweed important?

Author and poet Alice Walker wrote about giving praise to the Color Purple. What is your favorite color? What things in Rock Creek Park and the garden can you find with your favorite color?

"...for the enjoyment..."

Exercise and Recreation



Recreation is defined as "an activity done for enjoyment when one is not working or going to school." Now it's your turn to recreate in Rock Creek Park. Pick a fun activity to complete during your visit, and make sure it involves physical exercise. The possibilities are endless, but if you can't think of anything, the list below can help. Then answer the questions below.

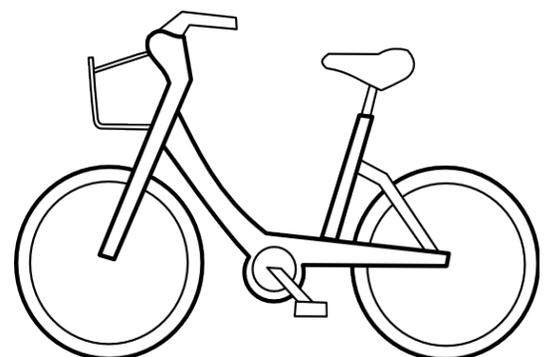
Popular forms of Exercise in Rock Creek Park

- **Hiking**
- **Walking**
- **Trail Running**
- **Bicycling** (please wear a helmet!)
- **Tennis** (the Rock Creek Park Tennis Center is located at 4850 Colorado Avenue, NW)
- **Frisbee**
- **Soccer**
- **Kayaking and/or Canoeing** (On the Potomac River, Thompson's Boat Center and the Key Bridge Boat House are managed by Rock Creek Park. Each of these boating centers rent canoes and kayaks. In addition, Key Bridge boathouse rents Stand-Up Paddleboards, or SUP).
- **Golfing** (the Rock Creek Park Golf Course is located at 6100 16th Street NW).

What exercise activity did you choose?

Where did you complete this activity?

Why is exercising is important?

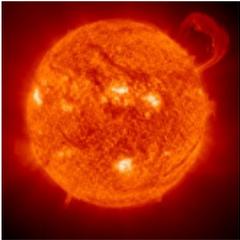


"...education..."

Astronomy



In the Nature Center, near the entrance to the planetarium, are astronomy exhibits. Check out the exhibits and then match each description to its planet below. Also, be sure and attend a planetarium show if you have time during your visit!



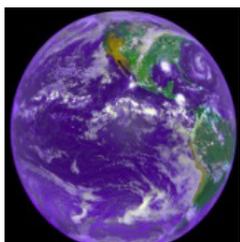
The Sun



Mercury



Venus

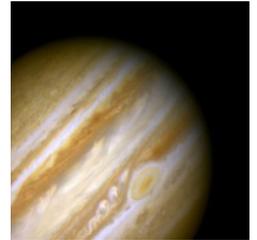


Earth



Mars

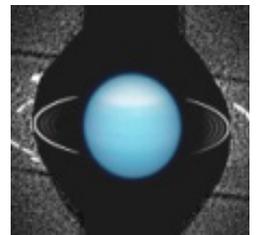
- Similar in size the Earth, this planet has a **runaway greenhouse effect**, making it very hot. This planet rotates in the opposite direction of the other planets. It can be seen from Earth and looks like a very bright star.
- The last "planet" to be discovered in our solar system. This small, cold object is **now considered a dwarf planet**. It orbits with Charon.
- Called the **Red Planet**, scientists have discovered water frost on its surface. Rovers and orbiters continue to study this nearby planet.
- This small planet has little atmosphere, so it has **extreme temperatures**. It can be as cold as -300 degrees F or as hot as 800 degrees F. It is similar the Earth's moon in many ways.
- The **largest planet** in the solar system, it is home to the Great Red Spot, a massive storm that is larger than the Earth.
- This beautiful blue planet is very special. Its surface is **70% water**. It was first seen from space by people in 1968. It has one moon.
- The planet best known for its **many rings**. It is the second largest planet in the solar system and has more than 30 moons.
- This planet can only be seen with a telescope. Its blue clouds are made of **frozen methane gas**.
- Made entirely of gas; planets orbit this energy emitting object in **the center of our solar system**. It contains over 99% of all the mass in the solar system.
- This **distant planet** was discovered to have faint rings. First named for King George III, but since renamed.



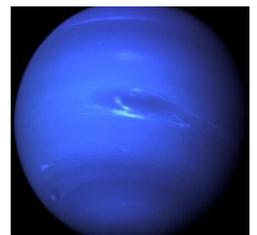
Jupiter



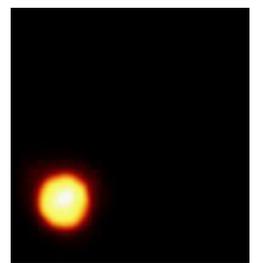
Saturn



Uranus



Neptune



Pluto

"...education..."

Ranger-led Program



Join a Park Ranger for one of our many guided programs and then answer the questions below. These programs are listed in our monthly calendar, and are on a variety of different topics. If there is no program being offered during your visit, check out one of the slide shows on the Nature Center flat screens and then answer the questions.

Program Title: _____

Date, Day, and Time: _____

What was the subject of this program?

What was your favorite part?

Name 3 new things you learned:

1. _____

2. _____

3. _____

Park Ranger's Signature: _____

Date: _____



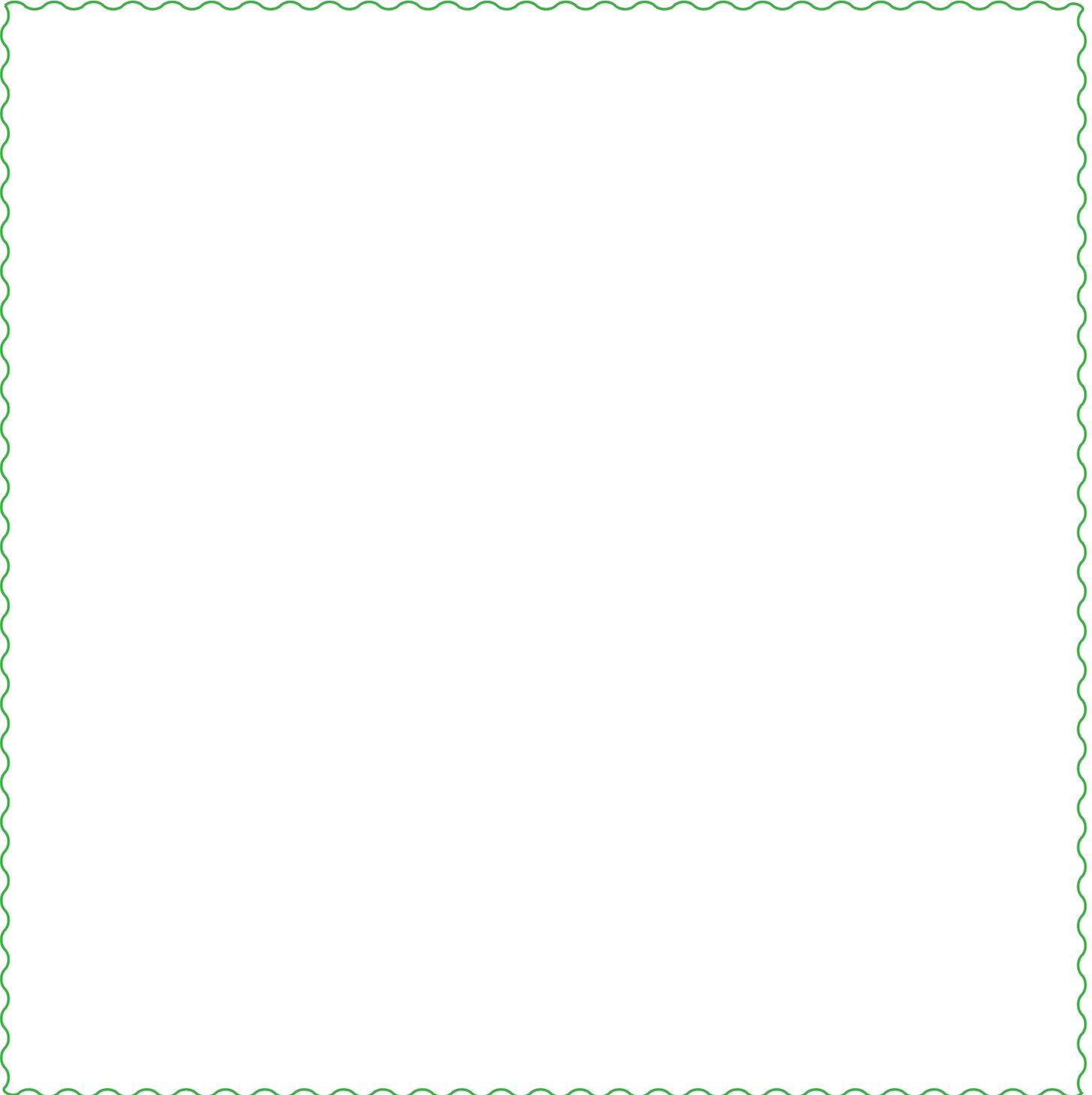
Park ranger preparing for his astronomy program in the Rock Creek Park Planetarium.

...and inspiration..."

Pictures and Peirce Mill



Perhaps you're someone who's more inspired visually. Many artists have enjoyed drawing historic Peirce Mill over the years. A water-powered gristmill which was used to ground corn and wheat into flour for cooking, Peirce Mill dates from the 1820s. Visit this mill along Rock Creek and then, like an artist, draw the mill in your own style.

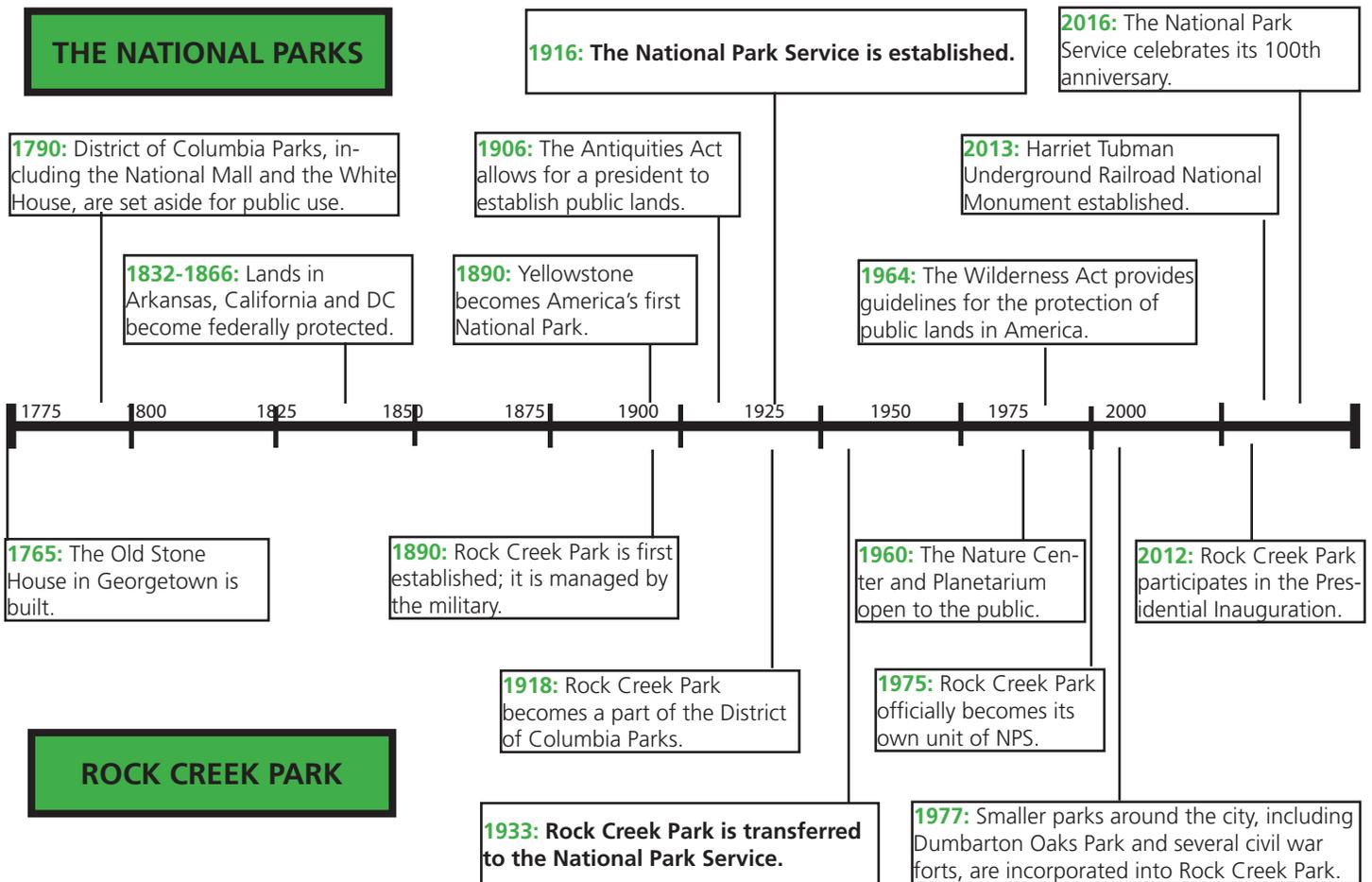


"...of this and future generations."

Timeline



The National Park Service is about to celebrate its 100th Anniversary! With your help, the parks will be around for many, many years to come. Take a look at the timeline below, and then use your math skills to answer the questions that follow.



Put a star on the timeline for the year you were born. How old will you be when NPS turns 100?

Dating back to when Rock Creek Park was first established, how old is the park today?

How many years passed between the creation of the National Park Service, and when Rock Creek Park became a part of the NPS?

In what year did the Old Stone House celebrate its 200th birthday?

Add the following events to the timeline: The Declaration of Independence

The Civil War

The Moon Landing

Congratulations!

Junior Ranger Pledge



As a Junior Ranger, I promise to help protect Rock Creek Park, my community, and the earth by being an active and responsible steward of the environment.

I promise to pick up trash in my neighborhood. I will not litter.

I promise not to feed wildlife, pick plants, or disturb any living thing.

I promise to respect all historical buildings and ruins.

I will continue to explore nature safely and be a good example to others.

Your Signature

Congratulations!

Junior Ranger Certificate



ROCK CREEK PARK JUNIOR RANGER



This is to certify that _____ has agreed to uphold the Junior Ranger Pledge and has completed the necessary activities to become a Junior Ranger at Rock Creek Park.

Witness: _____ Date: _____



EXPERIENCE YOUR AMERICA
