



Junior Ranger



Activity Book

Ages: 6-12

Name: _____

Introduction

Welcome to the Captain John Smith Chesapeake National Historic Trail! We're glad you decided to participate in our Junior Ranger program. These activities have been designed for kids ages 6 to 12.

Join **Clipper the Crab** to learn about the explorer Captain John Smith and his voyages of the Chesapeake Bay. Learn about the history and culture of the Indians of the Chesapeake Bay region and how they lived with the Bay. You will discover what the Chesapeake Bay was like over 400 years ago and why you are important to the Bay today.

A Junior Ranger agrees to help Park Rangers protect and take care of the National Parks. This is a big job because there are more than 400 National Parks in the United States!

The National Park Service also helps to take care of the Chesapeake Bay. As a Junior Ranger you will learn what you can do to help the Bay.

Our Junior Ranger activities have been planned to be done alone, with a group leader, teacher, friend, or with family members.

To earn your badge:

Children ages 6 or 7 need to complete **five** activities.

Children ages 8 or 9 need to complete **nine** activities.

Children ages 10 to 12 must do **twelve** activities.

Here's how to get your Junior Ranger badge: complete the activities and then send them to the following address. A Ranger will go over your answers and send you your badge. Please allow four weeks to receive your badge. Don't forget to include your name and address so we know where to send your badge!

Mail to: Captain John Smith
Chesapeake National Historic Trail,
Junior Ranger Program, P.O. Box 210,
Yorktown, VA. 23690

You can also submit a scanned version or photos of your book by e-mailing:
CAJO_Junior_Ranger@nps.gov

Good luck and have FUN!



Become a Scout Ranger with the Captain John Smith Chesapeake NHT! All Girl and Boy Scout members can earn a certificate or a patch.

Certificate:

- Participate for five hours in either an educational program or volunteer service or action project.

Patch:

- Participate for ten hours in either an educational program or volunteer service project.

Both options can be done through completion of the Junior Ranger activity book which earns five hours plus five additional hours in educational activities or volunteer projects at a partner site along the Captain John Smith Chesapeake National Historic Trail.



All National Parks are staffed by uniformed Park Rangers. These people care for our national treasures, performing all types of jobs. There are many National Park sites along the Captain John Smith Chesapeake National Historic Trail. Here are a few examples: Colonial National Historical Park, Fort McHenry National Monument and Historic Shrine, Great Falls Park and C & O Canal National Historical Park. The most recognizable symbol the rangers wear is the arrowhead.

Can you match the symbols with their meaning?

___ Sequoia tree

___ Bison

___ Mountain

___ Water

___ Arrowhead shape

A. Scenic

B. Historical

C. Wildlife

D. Vegetation

E. Recreational

Captain John Smith Chesapeake National Historic Trail

The Captain John Smith Chesapeake National Historic Trail stretches the length of the Chesapeake Bay and includes Delaware, Maryland, New York, Pennsylvania, Virginia, and Washington DC. It is the first national water trail in the history of the National Park Service. The Chesapeake Bay is the largest estuary in the United States at over 200 miles long. The bay begins at the mouth of the Susquehanna River in Havre de Grace, Maryland and enters the Atlantic Ocean at Virginia Beach in Virginia. The bay and its tributaries have approximately 11,684 miles of shoreline. This estuary supports more than 3,600 species of plants, fish, and animals. For more information, you can use the trail's website www.nps.gov/cajo as a guide to answer any questions you get stuck on.

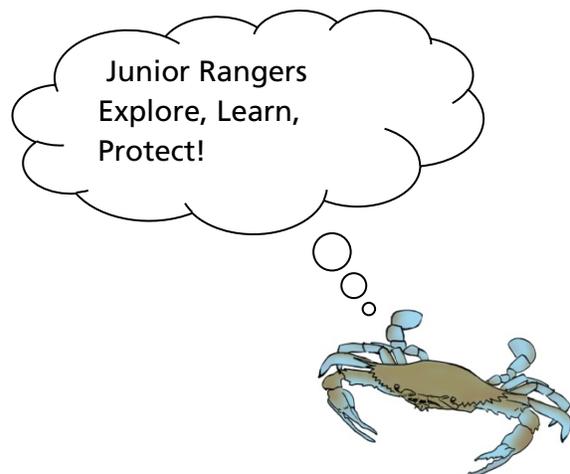
The best way to experience the Bay's history the way John Smith and his crew did - by water!

There are over 3000 miles of rivers and estuaries along the Captain John Smith Chesapeake National Historic Trail that can be used by boaters, kayakers, and canoeists at all skill levels. All of these rivers and estuaries flow directly into the Chesapeake Bay, so do your part to protect the bay by using the Leave No Trace conservation model. Leave No Trace builds awareness, appreciation, and respect for natural and cultural resources.

Leave them unimpaired = Do No Harm = Leave No Trace

Junior Rangers can help Park Rangers by:

- Respecting wildlife and historic places
- Being considerate of others
- Planning ahead and being prepared
- Disposing of all waste. Carry in, carry out!



**Did you use the Leave No Trace model when you were in the Chesapeake Bay Watershed?
How?**

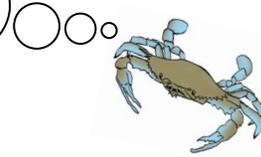
Captain John Smith and His Crew

If you were going on an expedition or journey who would you take with you? Would you take family members, a friend, a guide? What types of skills would they need to have? When Captain John Smith chose the men for his trip, he took people with special skills. There was a doctor, a carpenter, a tailor, a soldier, a fish merchant, a sailor, and a blacksmith.

Match the following terms to the correct definition.

Doctor	A person who knows what fish are edible and how much they can be sold for
Soldier	A person who sews cloth to make or mend items
Sailor	A person who works with metal to make useful metal objects
Tailor	A person who works with wood
Fish Merchant	A person who understands the human anatomy and how to heal the body
Blacksmith	A person who is armed and understands military tactics
Carpenter	A person skilled in seamanship

When Smith
explored the Bay,
oysters were as big
as dinner plates!



The Shallop

Captain John Smith used a type of boat known as a shallop, or barge, for his journey of exploration. This was a small work boat that had been brought from England in 1607. It had been built in two pieces, packed below decks on one of the three ships, and put together when the colonists arrived in Virginia. The shallop could carry a heavy load through shallow water. Captain Smith and his 12 man crew rowed and sailed this vessel for over 3000 miles as they explored the Chesapeake Bay and its many rivers.



What would you need to bring along for a four-month trip in 1607?

Word Scramble

Unscramble the words below that relate to the Chesapeake Bay and John Smith's voyage in mapping the bay.

Word Bank:

Map	Virginia
Canoe	Pocahontas
Ship	Creek
Crab	Crew
Shallop	John Smith
York River	Powhatan
Voyage	James River

OLLAPSH _____

ANIRVIGI _____

APM _____

ENOCA _____

WREC _____

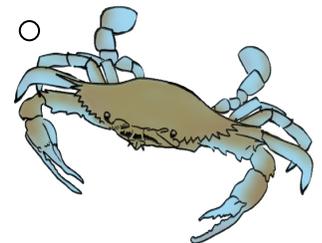
EVOYAG _____

SMEJA RRVIE _____

KYOR RRIVE _____

TAHWPONA _____

Captain John Smith explored most of the Chesapeake Bay in three and a half months.



Important Jamestown Figures

The success of the Jamestown colony depended upon the will of its leaders and assistance from surrounding Indians.

Circle the people who helped shape Jamestown in its early years.

Christopher Newport



Powhatan



George Washington



John Smith



CAPTAIN JOHN SMITH.

John Rolfe



Pocahontas



Thomas Jefferson



Opechancanough



Tecumseh



Smith's Voyages



Locate three destinations visited during the journey of Captain John Smith and his crew on this outline of the Chesapeake Bay.

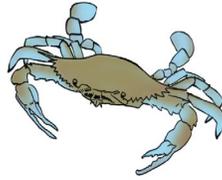


<http://www.virginiaplaces.org/boundaries/graphics/capes.gif>

BONUS QUESTION:

Captain John Smith recorded over 200 Indian communities on his map. Can you name at least three of the different tribes he encountered?

Did you know
that blue crabs
are Maryland's
state crustacean?



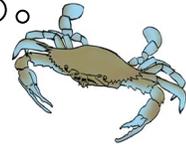
Word Search

Below are people, places, animals, or things that Captain John Smith encountered during his expeditions on the Chesapeake Bay.

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

Canoe	Soldier	Accomack	Spring	Shallop
Powhatan	York River	Voyage	Sting Ray	Estuary
Barge	Oyster	Stream	Fish	Map
Algonquian	June	Tribe	Blue Crab	Island
Goodly Bay	James River	Chesapeake Bay	John Smith	

The Algonquian
Indians used oysters
to shave their heads!



Indians in the Chesapeake

During his journey of exploration, John Smith encountered many different groups of American Indians. There were many cultural differences and even different languages among the various Indian tribes living around the Chesapeake Bay, but they also had much in common. They all had an expert knowledge of nature and intelligently used the Bay's resources.

The Indians moved their housing sites and sometimes entire towns periodically to avoid depleting the soil and natural resources. Two types of homes were common: yihakans and longhouses. Both were built of wooden frames covered by bark or reed mats. The sapling-and-mat houses were remarkably strong and could withstand heavy winds and heavy snows.

Draw a yihakan or a long house in the space below.

If you need help check out our website:

www.nps.gov/cajo.

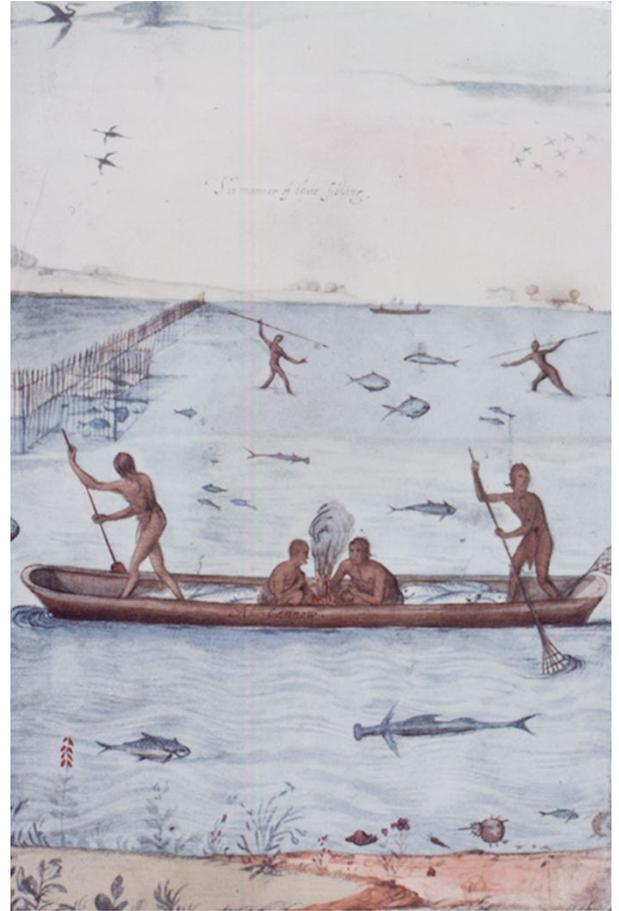


What's for Dinner?

Indian women and men worked together to feed their families. Women were responsible for farming and foraging; men did most of the hunting and fishing. Foods changed with the seasons.

- Farming: The main crops cultivated were corn, beans, squash, pumpkins, and sunflowers.
- Foraging: Women gathered nuts, seeds, berries, roots, and plants.
- Fishing: An abundance of fish and shellfish were found in the Chesapeake Bay and its tributaries.
- Hunting: Game included turkeys, rabbits, raccoons, bear, and deer.

The Indians of the Chesapeake Bay lived on the rivers and the Bay, using them for traveling as well as a source of food. They used nets, spears, and traps to catch fish and gathered oysters from the brackish waters. Captain John Smith was especially interested in trading for food from American Indians and how to cultivate crops for the settlers at Jamestowne.



(Circa 1585, John White)

What are some key differences in how Virginia Indians fed themselves and how most Americans do in modern times?

Chesapeake Bay = Estuary

What is an estuary? The Chesapeake Bay is one of the world's largest estuaries. An estuary is a body of water that is partly enclosed and allows for the freshwater coming from the streams and rivers to mix with saltwater that is coming from the ocean. The closer you get to the ocean the saltier the water.

What lives in an estuary? This diverse habitat supports a vast ecosystem of plants and animals. The underwater grasses and wetlands are perfect nesting and hiding places for small fish, crabs, and other creatures. Animals such as oysters and clams thrive here, helping to filter the bay by eating the small plant and animal particles in the water. In the 1600's, colonists reported oysters as large as dinner plates. There were so many oysters that they could filter all of the water in the Chesapeake Bay in 3 to 4 days. Today it takes the oyster population over a year to filter all of the Bay's waters.

Identify what natural resource is pictured and briefly explain how it relates to the health of the Chesapeake Bay.



Word Bank:

Oyster

Bald Eagle

Osprey

Marsh Grasses

Blue Crab

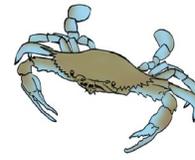
Scallop







Oh the places
you'll see!



Chesapeake Bay

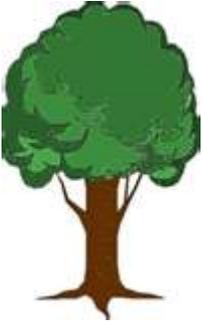
The Chesapeake Bay is full of beautiful and special places. As you travel along the Bay you might see a lighthouse, a museum, a fort, or a tall ship. You might visit a marsh, a wildlife refuge, a beach, or a river. Wherever you go in the Chesapeake Bay watershed, you're sure to see some interesting and exciting places.

Pick a favorite scene or place along the Captain John Smith National Historic Trail and draw it below.

A large, empty rectangular box with a thick black border, intended for a student to draw a scene or place from the Chesapeake Bay watershed.

What did you choose? Why?

Health of the Bay



Rain that falls in the Appalachian Mountains slowly flows downstream to become part of the Chesapeake Bay. The land, streams and rivers that drain into the Bay make up the Chesapeake Bay Watershed. The majority of the watershed consists of forested areas. The trees and undergrowth slow down the rainwater, allowing it to be absorbed by the ground. When heavy rains occur, this ground cover provides a slow release of nutrients in the soil into the water. When the English arrived in 1607 the forests were so dense in the Chesapeake area that they absorbed most of the fresh rainfall, leaving the Chesapeake Bay waters cleaner, clearer and perhaps saltier than they are today.

Today the Bay is in serious trouble. Many of the forests have been cut down to make fields, factories, roads, and parking lots. When it rains there is not enough ground cover to slow down or stop the water. Rain runoff, pollution, and an increasing population are all factors in why the Bay is unhealthy. However, measures are being taken to improve the health of the Bay.

Here's a list of simple things you can do to help protect the Chesapeake Bay.

- Pick up after your pet
- Turn off the water while you brush your teeth
- Save energy by turning off lights, the television, or radio when not in use
- Skip the pre-wash cycle by scraping off dishes before putting them in the dishwasher
- Recycle your plastic, aluminum, glass, and paper goods.
- Re-use plastic bags as well as multi-use items like canvas grocery bags and cloth napkins

If you're really ambitious to protect our planet, here are a few more things you can do with the help of an adult. Learn more at: <http://www.chesapeakebay.net/takeaction/howtotips>

- Plant a rain garden with native plants
- Install a rain barrel
- Start a compost pile
- Grow an oyster garden

Help the National Park Service think of environmentally friendly solutions:

I pledge to help protect the bay by _____.

I pledge to help protect my own community by _____.

Glossary:

Algonquians: Indigenous inhabitants of North America of the Algonquian language and culture within the U.S. and Canada.

Brackish: A mixture of salt and fresh water

Conservation: Sustainable use of natural resources

Crustacean: An animal that lives in the water and has a shell

Ecosystem: A system formed by the interaction of a community of organisms with their physical environment

Indigenous: Something or someone who is native to a particular area, descended from pre-colonial inhabitants

Mouth: Where a river empties into a larger body of water, like a bay or ocean

Nutrients: A type of food substance plants and animals need to grow

Preservation: Protection of natural resources and landscapes from further human use

Source: Where a river begins

Tributary: A smaller waterway (stream or river) that flows into a larger waterway

Watershed: An area of land that drains into a particular river, lake, or other body of water

Photo Credits:

<http://www.encyclopediavirginia.org/>

<http://wikipedia.org>

<http://srwt.org/sassafras-river-trail/points/>

<http://www.powhatanmuseum.com/Opechancanough.html>

<http://www.vahistorical.org/>

<http://www.firstnationsmonday.com/ANF/quotes.htm>

Junior Ranger Pledge



I, _____, am proud to be a National Park Service Junior Ranger. I promise to appreciate, respect, and protect all National Parks. I also promise to continue learning about the landscape, plants, animals, and history of these special places. I will share what I learn with my friends and family.

Junior Ranger Signature

Ranger Signature

Send my badge to:

Junior Ranger:

Age:

Address:
