NSDAR Educational Resources Committee



Virginia Geography and Native Americans

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2. IDENTIFY THE STANDARDS TO BE ADDRESSED – Virginia (Lesson can be adapted to any state)

Skills 1, a-i Civics 1.1, a-d History 1.4 a-c; 1.5 a and b

Geography 1.6 a-c. 1.7 a-d

Addressing and Enriching First-Grade Understanding, Questions, and Skills – This lesson plan includes information that can be used to enrich the lesson and adjust it for grades 2-4

OBJECTIVE AND LESSON OUTCOME: Students will learn about Virginia's geography, particularly the Powhatan Native Americans and the James River, how the environment impacts people's lives, and how the past contributes to understanding the present. They will also learn about a historically significant river in their state and community and its past and be introduced to the role of responsible citizenship in its future.

MATERIALS, RESOURCES, AND TECHNOLOGY USED:

- 1. Classroom globes, maps, and maps that can be used on classroom document cameras showing North America, the United States, Virginia's regions, and Virginia rivers highlighting the James River
- 2. Laminated picture/story cards of a map with Virginia and the James River, Powhatan Native Americans (longhouses, dugout canoe, etc.) Picture/story cards of some animals that lived, and in most cases still live, in or near the James River but not in abundance as in the past are included.
- **3.** Copy of procedure questions and information script.
- 4. Student handout: Maps that show North America, the United States, Virginia, Virginia Rivers, and Virginia Regions, and an activity box where students will draw one animal that can be seen along the James River.
- 5. Resources include: James River Association, Virginia Inland Wildlife and Fisheries, James River Park, Jamestown- Yorktown Foundation, U.S. Fish and Wildlife Service, Williamsburg DAR Partners' knowledge and personal experiences

OPENING QUESTIONS: Can you locate your state of Virginia on the United States map? Do you know where the James River flows and why it was important (essential) to the Powhatan Native Americans and the English people who settled in Jamestown? Why is the James River important to us today?

PROCEDURE FOR INSTRUCTION: See Attached – The instruction procedure, which reads like a script for especially new teachers, can be adjusted for the time available for each school or class. Also, this lesson can be divided into Part A, Part B, and Part C for three sessions or expanded for a week.

LESSON CLOSURE: Ask questions and use maps to summarize the lesson. Can you locate (find or discover) Virginia on the map of the United States of America? Can you locate the James River on a Virginia map, and do you know why this river was important/essential to the Powhatan Native Americans and English settlers? Why is the James River important to us today, and what can we do to protect it?

ASSESSMENT OF STUDENT UNDERSTANDING: Observation of interest, verbal responses, body language, participation in discussion, and following directions for handouts should give evidence of understanding.

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Virginia Geography – Focusing on the Powhatan Native Americans and the James River
This procedure guide helps new teachers meet multiple standards, including learning skills, and provides suggested teaching methods.

PROCEDURE FOR INSTRUCTION (This lesson was written for students who live in Tidewater, Virginia, but it can be adjusted for students in any location.)

PART A: Introduction:

Today, we will learn some things about the Geography of Virginia. (pause) WOW! Geography—Now, that is a big word. Does anyone know what geography means? Encourage the children to guess and LOG what they say.

<u>Geography</u> is the study of our earth and its people. When we learn about geography, we understand how land, air, and water affect people's and animals' lives.

What do you see when you go outside and look around? What <u>landforms</u> do you see? Do you see landforms like hills? Valleys? (low areas between hills and most of the time have a river or stream through the valley) Mountains? Flat land? Is the land around you flat? What kind (type) of trees and other forms of vegetation, like bushes, do you see? Is the soil (ground) sandy? Rocky? Do you live near the beach? What do you see when walking or driving around Williamsburg or James City County? Do you often have to ride over bridges and see lots of water in the <u>region (region)</u> where you live? Do you see rivers, creeks, marshes, and wetlands where you live?

Your environment surrounds you—all living things like plants, animals, and people and nonliving things like rocks, air, sunlight, land, and water.

Geography is about the land we walk on, the water in our creeks, rivers, bays, and oceans, the hills, valleys, mountains, beaches, and the people and animals who live in all these places worldwide.

Do you remember when you learned that the state where you live - Virginia- has four seasons – spring, summer, fall, and winter? We have four seasons of the year because of where our state is located (found). When you learned about the year's seasons, you were learning Geography.

Let's see what else we can learn more about where you live.

Use maps, cardinal directions, and compass roses to ask questions. First-grade students are not expected to know or remember all you are introducing. You are planting "seeds" and moving on.

(See the maps attached and use on the document camera)

You know that you live in the <u>United States of America</u>. (pause and point) You are a citizen of the United States of America. Our country, the United States of America, is located on the North American continent. Now, look at our flat <u>map</u> of the <u>United States of America</u> and <u>locate</u> (find) the state of <u>Virginia</u> where you live.

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OPENING QUESTIONS: (Use maps as you present these questions and point out the title and compass rose.

- 1. Can you locate your state of Virginia on the United States Map?
- 2. Do you know Virginia is located on the Southeastern Coast of the United States?
- 3. Do you know we live in the <u>Coastal Plain Region</u> (area)? You can make a big deal with body language, including hands moving from the Atlantic Ocean toward Virginia. The Coastal Plain is flat- many r)ivers and marshes because we live near the Atlantic Ocean, Chesapeake Bay, rivers, and waterways. The water comes and goes where we live from the ocean tides. If time allows, you can mention that the salty Atlantic Ocean water comes in with the tides, and the further northwest it goes, the less salty it gets.
- 4. Do you know the James River starts way up in the mountains of Virginia and flows (keeps moving) empties into the Chesapeake Bay and then the bay flows into the Atlantic Ocean?
- 5. Do you know where the James River flows and why it was essential (important) to the Powhatan Native Americans and the English people who settled in Jamestown?

These are fun geography questions for us to think about.

Part B: Storytelling: Invite students to the classroom gathering area and, using the story cards attached TELL the story of *Native Americans Living Along the James River*. If the students haven't been at their desks or tables too long, you might consider using the story cards on the document camera.

Today's story is about the Native American people who lived on land along the longest river in what we now call Virginia – our state. (Pause) The land we live on was not always called Virginia, and the river we call the James River wasn't always named the James River. This land and river were here long before the English settlers came to Jamestown. English settlers came to the land we live on over 400 years ago, and this land has been here for thousands of years. (Humans first arrived in what is now known as Virginia around 18,000 years ago. Thousands of years later, various Native American tribes inhabited this land. Among these tribes were the Tuscarora, Croatoan, and Cherokee, but this story focuses on the Powhatan tribe, who lived along the James River.)

(Story Card #1-Outline map with Powhatan River) - Native Americans lived along a river now called the James River. This long river begins as a small stream in the mountains of Virginia, flows down to the "fall line," and continues to the Chesapeake Bay, which empties into the Atlantic Ocean. Southeast of the "fall line," where the city of Richmond is located today, lived the Algonquin Indians of the Powhatan Tribe. They lived in villages, farmed, and grew food in the rich, fertile soil along the James River, which the Native Americans called the Powhatan River to honor their Great Chief Powhatan. They made pottery,

hunted animals with traps, bows, and arrows, and fished in the river. There were trails/paths from the river into the lush wooden forest with many healthy plants, trees, and animals.

(Story Card #2 – Powhatan Village) One day, a boy named Wahunsenacawh (WAH UN SO NA COOK) was born in a village near the <u>"fall line"</u> of the Powhatan River, and <u>the Great Chief Powhatan</u> was his father. This village is located near the City of Richmond today.

You might be wondering what a river's "fall line" is. (Use a map and compass rose to help students see the river as it flows southeast to the ocean.) Where a river flows from the <u>mountains or hills</u> and enters the flat <u>Coastal Plain Region (area)</u>, there is a <u>"fall line</u>." There are waterfalls and rapids at the <u>fall line</u> of a river.

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(Story Card #3- A photo of the "fall line" today in Richmond, Virginia.) When Wahunsenacawh (WAH UN SO NA COOK) was a young boy, he would have fished and played among the rocks, waterfalls, and rapids at the river's "fall line" near his village. Do you know who this boy would grow up to become? (Yes, this Powhatan boy who fished at the river's "fall line" in Richmond would become Chief Powhatan, whom the English Settlers would meet when they came to the area that would become Jamestown.)

(Story Card #4 -Inside of a longhouse) Wahunsenacawh (WAH UN SO NA COOK) lived in a longhouse with his family. The river, animals, and good soil provided all his family needed for food, clothing, and shelter. His mother taught him how to grow beans, pumpkins, squash, and corn and use deer antlers as garden tools. And, like all young Powhatan boys, he learned how to use a bow and arrow to hunt for bears and whitetail deer and used traps to catch opossums, raccoons, squirrels, and turkeys.

(Story Cards #5, #6, and #7) Examples of animals that inhabit (live in) the area around the James River

(Story Card #8 - Dugout canoe) Powhatan boys learned how to make <u>dugout canoe</u>s from a single chestnut and pine tree log that grew along the river. In winter, dugout canoes were filled with stones to sink them to the bottom of ponds before the water froze to keep the wooden canoes from drying out.

They paddled their canoes up and down the river to fish and <u>trade</u> with people. They fished for sturgeons, crabs, oysters, and other food. Powhatan people learned how to use oyster shells, stones, and the skin and bones of animals as tools to make clothing, shelter, and other things they needed, and they taught these skills to their children. (Story Card #9– River animals)

Wahunsenacawh (WAH UN SO NA COOK became chief because his mother was the sister of a previous (earlier) chief. In the Powhatan Tribe society, leaders came from the mother's side of the family. After he became Chief Powhatan, he brought more tribes into his empire and ruled over thousands of people (Story Card 10 – Image of a Powhatan man whom some people think may have been Chief Powhatan)

When the <u>English settlers</u> came to build Jamestown, Chief Powhatan ruled the territory along the river from the "<u>fall line</u>" southeast to the **Chesapeake Bay**. (From today's Richmond, Virginia to the Chesapeake Bay – about where you live)

(Story Card #9- Great Blue Herons and Bald Eagle) <u>Chief Powhatan</u> and his daughter, <u>Matoaka</u>, <u>nicknamed Pocahontas</u>, would have seen <u>Great Blue Herons</u> fish in the river and majestic <u>Bald Eagles</u> soar in the sky. Today, we still see these large birds in Virginia – where we live in the <u>Coastal Plain region</u>.

(Story Card #10 – Image of three ships) When the English settlers arrived in Tsenacommacah, this region (area) was inhabited (lived on) by the Powhatan people. The English named the village Jamestown, and when Captain John Smith and Captain Christopher Newport explored the Powhatan River, they called it the James River in honor of their king, King James. You probably have heard about Captain John Smith, but do you know anything about Captain Christopher Newport? He was the Captain of the Susan Constant, the largest of the three English ships that first came to start the settlement at Jamestown. Also, Captain Newport was the commander of the other ships, the Godspeed and the Discovery. These ships carried the Virginia Company's English colonist across the Atlantic Ocean to Jamestown, which became the first permanent English settlement in North America. (Raise your hand if you have seen these ships at Jamestown?)

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Sing: A <u>Longhouse</u> is My Home (See attached). Use this song to review concepts and for enjoyment. Have the children listen to you sing the song first and then ask them questions. Teach them the lyrics and ask them to compare what they have learned with the song's words.

> What river do you think this song is about? (Yes, the Powhatans called the James River the Powhatan River before the English settlers came to build Jamestown.)

>What kind of canoes did they make to paddle on the river? (Yes, they made <u>dugout canoes</u> out of tree logs to travel up and down the river to fish and trade with other tribes for things they needed or wanted.)

>What type of house did they build? (Yes, a <u>longhouse</u>. What materials did the Powhatan people use to make their longhouses?

This song reminds us of why the Powhatan River, now called the James River, was important to the Native Americans' way of life/the way they lived.

Have fun with the children as they will enjoy the song. Sing the song again and put in the beats with your hand on your thigh.

PART C: Lesson Closure

Today, we learned some things about the Geography_of <u>Virginia</u>. Let's look at our LOG from the beginning of the lesson to compare what we knew and what we have learned.

- Virginia is located on the <u>Southeastern Coast of the United States of America</u> in a region (area) called the <u>Coastal Plain</u>. Sometimes, people call the <u>Coastal Plain</u>, where we live, <u>Tidewater</u>, <u>Virginia</u>.
- 2. The <u>James River</u> is located in Virginia and flows from the <u>Virginia mountains</u> to the <u>Chesapeake</u>
 Bay and out into the <u>Atlantic Ocean</u>.
- 3. The health of the James River has changed since it was called the Powhatan River. It is not as clean as when Chief Powhatan, Pocahontas, and explorers Captain John Smith and Captain Newport paddled canoes up and down the river. Today, some areas of the James River are polluted (unclean.)

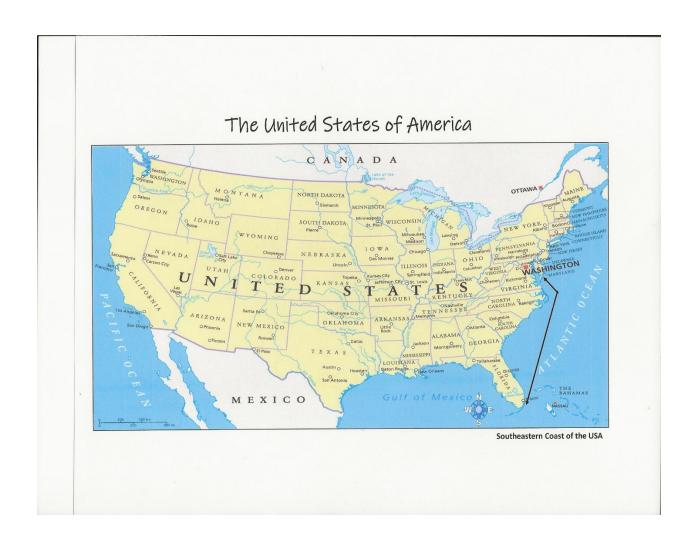
- 4. We can be good and responsible **citizens** by keeping the <u>James River</u> clean. We use the <u>James River</u> for water, <u>food</u>, <u>transportation</u>, and <u>recreation</u> (boating, fishing, swimming). Animals also need good, clean water.
- 5. The <u>James River</u> was influential (important) in the <u>past</u>, <u>today</u>, and will be important in the future. It is up to us to be good and responsible citizens and care for our rivers.

Handout: (See attached) Froggie's handout has a back and front page showing the maps used in this lesson's introduction and a box for the children to draw one animal they may see in or around the James River.

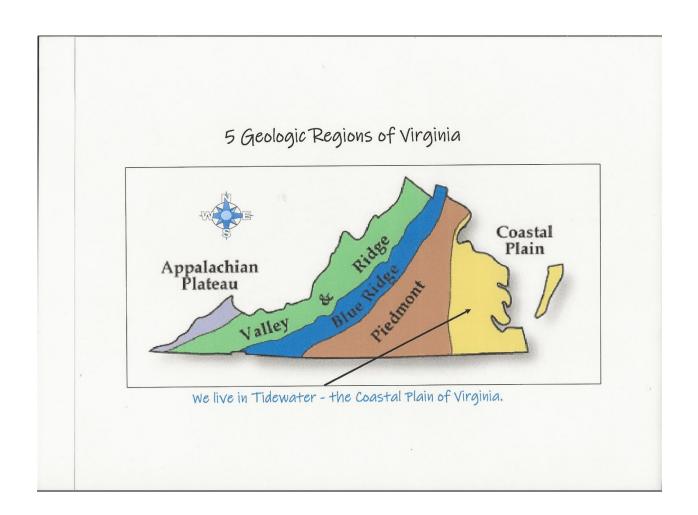
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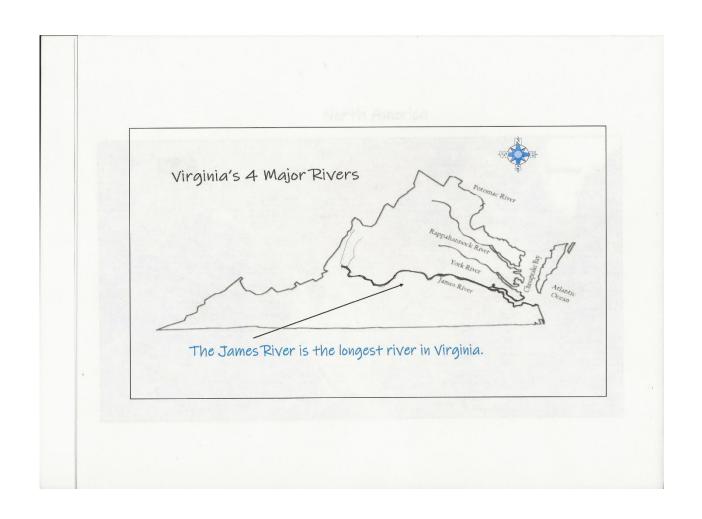
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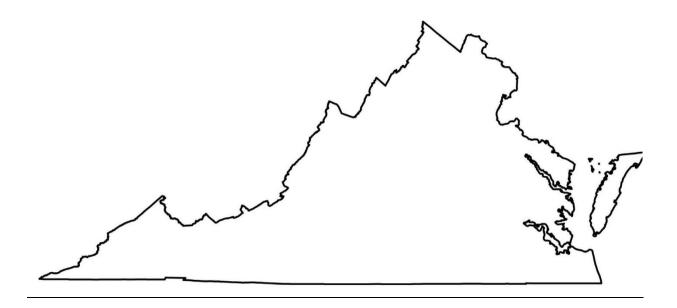


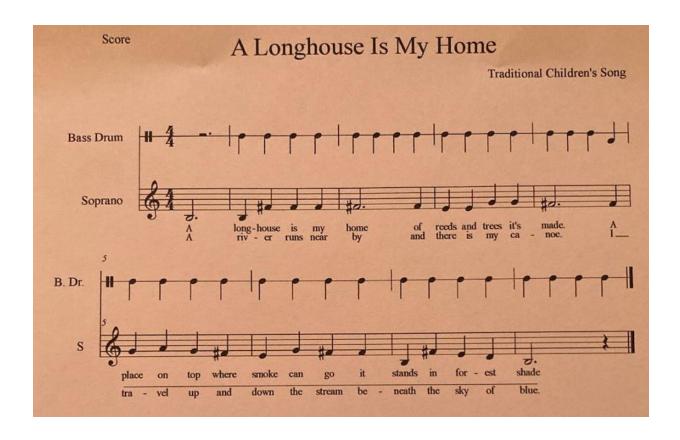
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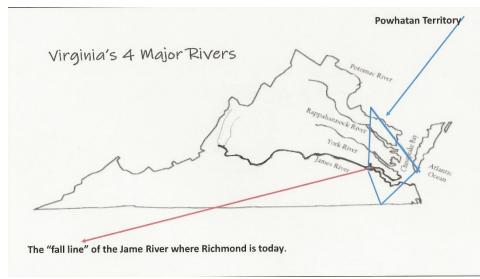
Map of Virginia





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Story Cards Story Card #1



This card shows the approximate territory Chief Powhatan controlled.

They lived in the
Tidewater-Coastal
Plain Region—from
the south side of the
James River to the
Potomac River, parts of
the Eastern Shore, and
an area they called
Tsernacommacah.

Teachers might use the outline map on page 10, draw in the "fall line" where Powhatan was born, and circle the territory later in the story, as the map above might confuse first-grade students.

Page 13 - Mary Sue Dougherty & Robin Curtis Story Card #2 – Powhatan Village – Powhatan Native Americans lived in longhouses.

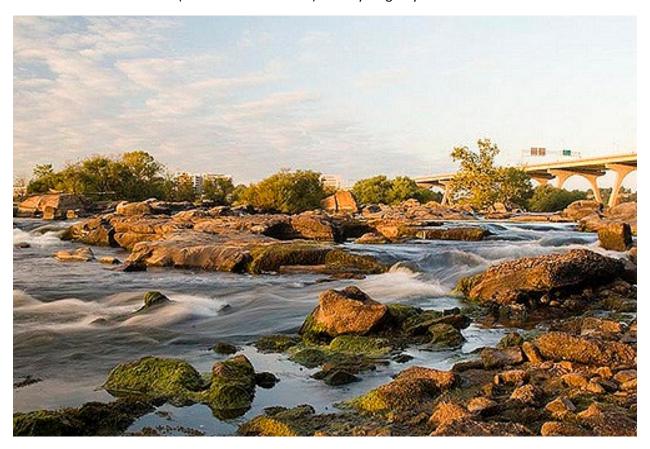


Powhatan Native Americans lived in villages near the river and woodlands. They built their homes with tree saplings covered with reeds, mats, or bark. All these materials were in the woods or around the river where they lived. The English Settlers named the Powhatan homes longhouses. Longhouses were built in the center of the Powhatan village. Powhatan women would plant their crops of pumpkin, squash, and corn outside of the village near their longhouses.

Look carefully to see how the longhouses were made. In the spring, young tree saplings are not stiff yet; they are flexible and bend easily because their sap has not hardened. Sap is the sticky substance (stuff) inside a tree that transports (takes) energy to the branches. Tree saplings were bent to make frames for longhouses. After the frames were tied together (secured), they were covered to make the sides and roof of the longhouse. Reeds (long grass) were gathered around the river wetlands to cover the frames. The reeds and tree bark were also woven into mats to cover the frames.

You might be thinking — Where are the tepees? Powhatan Native Americans did not live in tepees like the Western Plains Native Americans you see in movies. The Western Plains Native Americans had to build houses like tepees that they could fold quickly and move to the next buffalo hunting ground. Powhatan people farmed, fished, and hunted. They had all they needed in and around the river and didn't need to move around to follow the herds of buffalo. Longhouses would stay up from season to season and year to year.

Teachers can use this photo to ask," Do you think this is what the "fall line" of the Powhatan River looked like when Wahunsenacawh (WAH UN SO NA COOK) was a young boy?



This is a modern-day photo of the "fall line" of the James River. However, students can get the idea of what a "fall line" looks like as it will play an important role in how Virginia developed later for students.

The "fall line" of a river is an area where the upland (higher ground) meets the Coastal Plain (Tidewater) area. It is where there are rapids or waterfalls. In Virginia, water comes rushing down the mountains, and when it gets to the "fall line" in present-day Richmond, it comes to the rocky "fall line" and begins to slow down as it makes its way down the Coastal Plain to the Chesapeake Bay and into the Atlantic Ocean. Ships can travel from the Atlantic Ocean into the Chesapeake Bay and up the James River but they can not go past the "fall line." The water is not deep enough, and the land and rocks keep ships from traveling upriver past the "fall line" to the higher and steeper land and mountains. The Powhatan Tribe lived near the "fall line" and to the south of the "fall line" all along the river.

This photo gives students an idea of one of the places Chief Powhatan fished as a young boy. As he got older, he would have traveled further southeast down the river, where the water became wider (broader), deeper, and saltier as it flowed into the **Chesapeake Bay** and finally emptied into the **Atlantic Ocean.**

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Animal story cards are intended to provide teachers with information to share with students as "enrichment

tidbits" when appropriate to first-grade students' understanding of concepts and the time allowed for the lesson. Or, the Animals of the James River could be a separate lesson.

Story Card #5 – White Tail Deer – Native to Virginia



<u>Characteristics:</u> The White-tailed Deer is an animal with hooves(ungulate) and is the smallest deer in North America. They are mammals and plant eaters. Adults have reddish-brown fur coats in the summer that fade to a dull grayish-brown in the winter. A doe is a female deer, and a buck is a male deer. (Pigs, horses, camels, and cattle are examples of other hooved animals— some have odd-toes, and some have even-toes.)

White-tail deer are started quickly. When they sense danger, they stick their tail up to alert other deer in the herd. Their tails have white fur on the underside of their tails.

A baby White-tail Deer is called a fawn. Fawns have white spots covering their brown backs. Their color helps them become camouflaged (blend into their environment) - Some people think these white spots look like sun flecks in the light. Sunlight shines around trees in the forest, and the fawn's white spots help them hide from predators. Fawns can stand 20 minutes after birth, walk in an hour, and outrun a man in 5 days.

White-tail deer don't have stomachs like we do. They can eat poison ivy, mushrooms, and other plants that would make us sick. Their chin whiskers tell them how far their lips are from the plants they eat.

<u>Habitat:</u> White-tail deer live in forested (wooded) areas and eat plants. They like to live where many trees, bushes, and other plants will help to hide them (camouflage) and where there are many plants for them to eat. They need to have a source of water nearby. The forest around the James River is a excellent habitat for the white-tail deer.

White-tail deer were essential to the Powhatan Indians. They hunted these animals in the woods for food and used their skin for clothing. Powhatan Native Americans knew how to use all parts of White-tail Deer, including their bones and antlers.

Story Card #6- Raccoon - Native to North America



<u>Characteristics:</u> The name raccoon comes from a Powhatan word that John Smith listed among the animals he found in Virginia when the English settlers arrived. All the animals on our cards were native to Virginia when the English colonists arrived. Raccoons are mammals and have a grayish coat with a thick (dense) undercoat of fur. They are stocky animals with short legs, small, rounded ears, and a brown-black streak from their foreheads to their nose, making it look like it is wearing masks. Raccoons are good climbers and swimmers. They have black bands on their tails. Powhatans wore raccoon fur for clothing and ornaments—early settlers who were traders wore coonskin hats.

Raccoons are intelligent and curious creatures. They are nocturnal (night) mammals and can see well in the dark. During the day, they sleep in their dens in trees or burrows.

Raccoons have agile(flexible) paws and can pick up small things. In the wild, they eat sweet corn, insects, worms, fruits, walnuts, acorns, fish, frogs, birds, and their eggs. Sometimes, they look like they are washing their faces with their paws.

Habitat: Raccoons are highly adaptable animals, able to change environments quickly. Today, they can be found in wooded areas near streams and rivers, grasslands, and even in urban (city) areas.

They will eat dog and cat food left outside and any trash they can get into. Not all raccoons are infected with a disease called rabies, but some are, and it is best to stay away from ALL raccoons and ALL wild animals. They can bite you, and you can get ill.

Eastern Gray Fox - Native to Virginia



<u>Characteristics:</u> Eastern Gray foxes and have speckled gray fur on their backs and reddish-brown fur on their sides. They have a long, bushy tail that has a black stripe down the top to its tail, pointed ears, and muzzles. (An animal's muzzle is the part of the face that begins just below the eyes and includes the nose and mouth.)

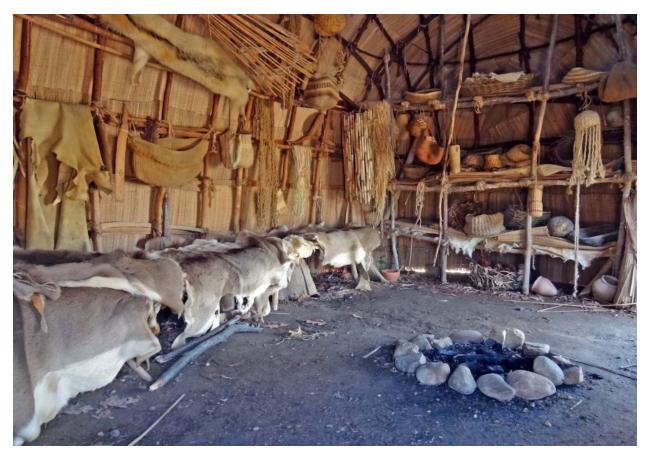
The Eastern Gray Fox is smaller than the red fox you see in Virginia. The red fox has black ears and legs and white on the tip of its tail and chest. Red foxes can't climb trees like an Eastern Gray Fox. The Eastern Gray Fox is the only North American Canidae Family member to climb a tree for protection. Sometimes, they make their den on the tops of trees to keep their babies safe and away from coyotes who have moved into their area.

A female Eastern Gray Fox can give birth to 1-7 pups, which are called a litter. The Eastern Gray Fox belongs to the same family of animals as a dog. They are mammals like we are.

The Eastern Gray Fox is a meat-eater that likes small mammals like rabbits. It also eats voles, moles, birds, insects, corn, apples, nuts, berries, grass, and grasshoppers.

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Story Card #8- Inside a Powhatan Longhouse



Do you remember the picture of the Powhatan Village? (To remind students, go back to Story Card #2.)

This picture is what the Powhatan longhouse looked like inside.

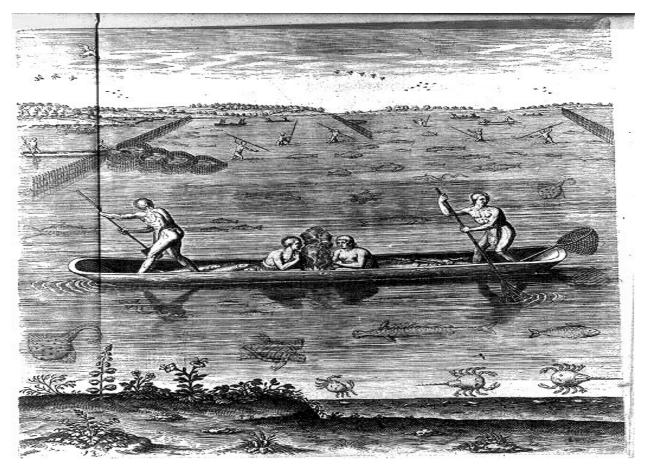
Usually, more than one family would live in a longhouse, and some homes were large.

Students like to identify what they see inside this longhouse; some students have been to Jamestown and can share what they know. Examples

- -the whitetail deerskin hides that cover the beds.
- -the fire that was kept going to keep it warm and dry with a hole in the top of the longhouse for smoke to go out and air to come in.
- -the sides of the longhouse with the sapling trees tied together to make a frame and reeds
- -fishing nets hanging to dry , hunting traps, bows and arrows
- -pottery
- -other items needed for farming, cooking, and hunting

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(Story Card 9- Dugout Canoe)- Students usually enjoy acting out, cutting down a tree and scooping out a log to make a dugout canoe.



Powhatan Native Americans built their dugout canoes from single trees growing along the river.

Powhatan Native Americans lived from the "fall line" of the Powhatan River to and around the Chesapeake Bay. The banks in this part of the Powhatan River, later named the James River, were perfect for building dugout canoes. Large dugout canoes were built for traveling in the Chesapeake Bay, and smaller ones for the river. Many people could fit into the larger canoes.

Dugout canoes were made of single trees along the river. A small fire was set at the bottom of a tree to burn away the trunk from the tree roots. When the bottom of the tree was burned away and soft, the tree would fall or be pulled over onto the river bank. Then, the branches would be taken off the tree's trunk until it looked like a log.

Small fires were made on the inside of the log that would become the open part of a canoe. They would work in small areas of the log and start a fire, let it burn some of the wood, put out the fire with river mud and water, and then scrape out (dig out) the burned wood, fire coals, and ash out with oyster shells. They burned the log and scraped (dugout) to dig it out repeatedly (over and over) until they had the inside of the log deep enough for people to stand or sit inside to paddle their dugout canoe.

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When the canoe was ready to be launched, it would slide easily into the river from the sandy riverbanks or slimy banks of the wetlands. Dugout canoes were perfect for traveling around in the wetlands around the lower part of the Powhatan River and the Chesapeake River.

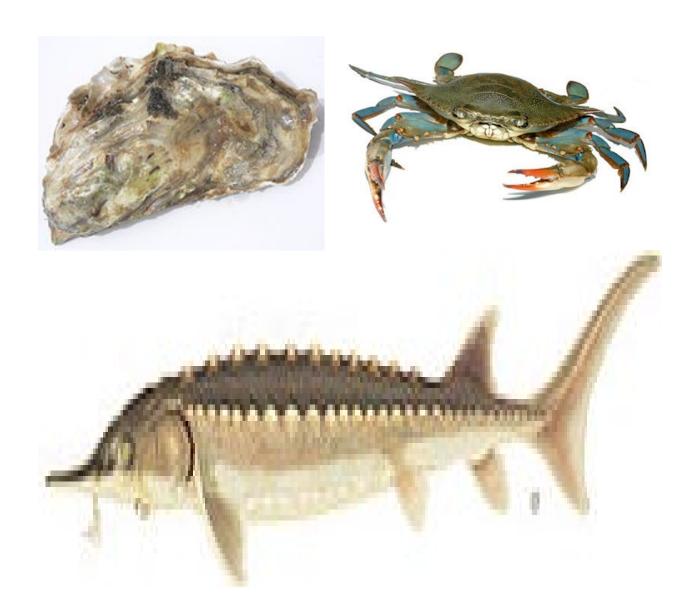
After English settlers came, a metal tool called a hand adz (adze) helped make dugout canoes easier and faster. This tool looked somewhat like an ax with a curved piece of metal. The Powhatans probably traded food with the settlers for metal tools.

The English settlers thought dugout canoes were excellent transportation. They used them to travel on and around the river and wetlands. They tied two or more dugout canoes together to make a larger one to transport the tobacco they grew on the plantations to the big ships downstream.

In this early drawing, a sturgeon, stingray, crab, and other sea creatures are in the water. At the top of the picture, you can see how the Powhatans blocked off a fishing area for low tide and waded out to fish with their spears.

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(Story Card 10) – Native to Virginia animals who lived, and some still do, in the James River



Sturgeon - Native to Virginia - <u>Characteristics: The </u>Atlantic Sturgeon is a fish with ancestors that go back millions of years and lived when denoisers lived. They look like "living dinosaurs" with sharp ridges on bony plates that cover their sides and back. Sturgeons live in the Chesapeake Bay and the Atlantic Ocean and swim upstream in the James and York Rivers in the spring and fall to lay their eggs. Sturgeons and their eggs are prized seafood, and this excellent old fish once almost became extinct. The sturgeon is an endangered animal, and fishing for them is illegal.

Sturgeons leap out of the water and make a loud splash, which can be heard a long way underwater and about ½ mile away on top of the water. When they arrived, the English settlers found many sturgeons in the lower James River and the Chesapeake Bay. They ate a lot of sturgeon.

<u>Habitat</u>: Atlantic Sturgeons live in the coastal area and the ocean. They migrate to freshwater rivers where they hatch to spawn and make more fish yearly. That means they would migrate(move at a particular time of year) upstream in the James River to the "fall line" in Richmond to spawn and make more fish.

Oyster - Native to Virginia- <u>Characteristics:</u> Oysters have grayish-white shells. Oysters are mollusks with rough shells. Snails and clams belong to the same family as oysters. All oyster shells don't look alike, and shells grow as the oyster gets bigger. Oysters open, close, and rest their shells to filter the water and get food. There are different kinds of oysters – some even have pearls – many people like to eat oysters. The oyster industry is important in Virginia.

<u>Habitat</u>: The Chesapeake Bay is the largest oyster-producing body of water in the United States. A group of oysters is called a bed or oyster reef. Oysters are raked up from their beds. There aren't as many beds of oysters as there were when the Powhatans and English settlers lived in this area. Oysters, like crabs, have been overharvested, and pollution has killed many of the oysters. Oysters are important to the health of the water and other sea life in this area. The Chesapeake Bay needs oysters. Virginia is known for having good oysters to eat.

Blue Crab – Native to Virginia – Beautiful Swimmers – Symbol of the Chesapeake Bay Characteristics: Blue crabs are grayish on top and off-white on the bottom. They have ten legs: 2 act as paddles for swimming, 2 are pinchers for grabbing food, and for defense (for protection).

<u>Habitat:</u> Crabs like the muddy shores, bays, and rivers in the Tidewater (Coast Plain Region) area where we live. Crabs like to live in salty water. The Chesapeake Bay needs blue crabs not only for the excellent taste of crab meat but also to help other animals like oysters and fish like striped bass and other fish to live. Crabs are scavengers because they feed on the bodies of dead animals at the bottom of the river and bay.

Crabs and oysters provide jobs for many Virginians.

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(Story Card 11) – Old Drawing of Powhatan Man – Some people think this drawing could be of Chief Powhatan.



<u>Page 24 – Mary Sue Dougherty & Robin Curtis</u>
(Story Card 12) – Great Blue Heron and Bald Eagle



Notice the grass and reeds along the river. Longhouses were made of reeds.



Page 25 – Mary Sue Dougherty & Robin Cutis

The Great Blue Heron – An elegant and graceful bird – Symbol of the Chesapeake Bay watershed

Characteristics:

Adult Great Blue Herons are about 3-4 feet tall and have blue-gray feathers, long legs, and dagger-like bills. Their wing span is almost 6 feet. They tuck their long necks in when they are resting or flying.

Because you live in the Coastal Plan Region of Virginia (Tidewater), you have probably seen these interesting birds wading around the edges of the water in our area. They slowly lift their long legs to wade in shallow water. They watch and wait until they see their prey. Then, they quickly and precisely spear the fish with their dagger-like bills. Great Blue Herons like to eat salamanders but will eat snakes, lizards, crabs, shrimp, dragonflies, and small mammals like mice.

<u>Habitat:</u> Great Blue Herons live in wetlands, marshes, rivers, lakes, saltwater shores, and ponds. In Virginia, they like to live in and around the James River and the Chesapeake Bay. Our area is a perfect habitat (home) for Great Blue Herons. Great Blue Herons live in a colony that is called a 'rookery.'

During this lesson, young students enjoy role-playing a Great Blue Heron to transition to another classroom space.

The Bald Eagle – Our National Symbol – They are majestic birds.

Characteristics:

An adult Bald Eagle has a bright white head, large yellow bill & long white tail feathers. It looks like it is bald, but it isn't. The word "bald" comes from an old English word, "balde," which means white.

Baby egrets are gray and then turn brown for protection. They don't get their adult colors for about 4-5 years.

Bald Eagles have a hooked-shaped beak to tear food and talons (claws) to hunt and defend themselves. Their call is a shrill, creaking sound that sometimes resembles a crackling sound.

Bald Eagles have a wide-wing span (about as wide as a classroom is high)

They have perfect vision and can see 4X better than we can. They can see a fish in the water about a mile away, and they swoop down with their expansive (wide) wing span to pick up fish, birds, and small mammals like mice.

<u>Habitat:</u> The Bald Eagle's habitat (their home -where they like to live) is in the forest near a large body of water. They build their nest in the tops of trees where the female lays eggs.

Because you live in Virginia's Coastal Plain Region (Tidewater) area. You have probably seen these majestic birds. Bald Eagles almost became extinct (none were left living) because of pollution and hunting. Now, they are protected and have made a remarkable (great) comeback. They like the James River and the woods around the river. We want to help keep the river clean and keep trees along the river so that the Bald Eagle will always have a place to live near us in the Tidewater area.

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(Story Card 25) The Susan Constant, Godspeed and Discovery



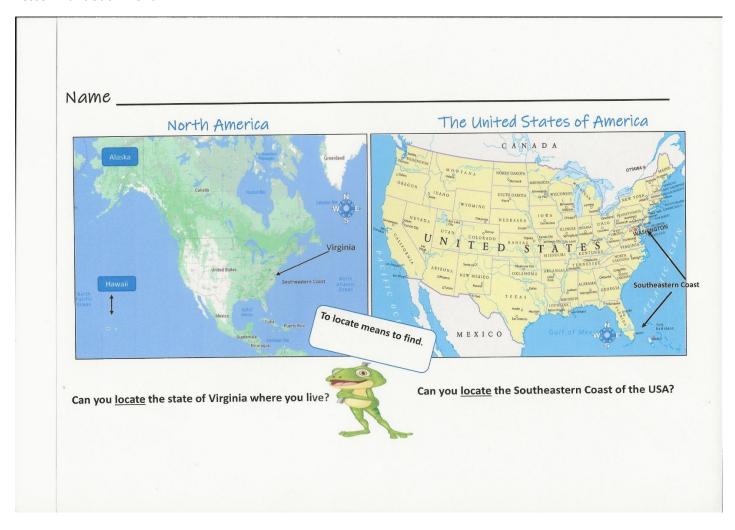
Credit: Jamestown-Yorktown Foundation Museum

The Virginia Company of England was a trading company that brought the first English colonists to the New World on three ships: the Susan Constant, Godspeed, and Discovery. These colonists settled in the Coastal Plain region, which became known as Virginia, and established the first permanent English colony in Jamestown.

Page 27 – Mary Sue Dougherty & Robin Curtis

(Student Handout) Enlarge and print in "landscape" for a two-sided handout and work with the students from the document camera as a review, or print on two sheets for two lessons. The back of one sheet could be used for students to draw a picture of Virginia and the James River, marking the "fall line" (Richmond and about where they live, etc. Students could draw a picture of the river with a dugout canoe and add animals on the river's bank and in the water on the back of the other sheet. **Again, this lesson can be used as a guide to create lessons for other states and locations.**

Lesson Handout - Front



Lesson Handout- Back

