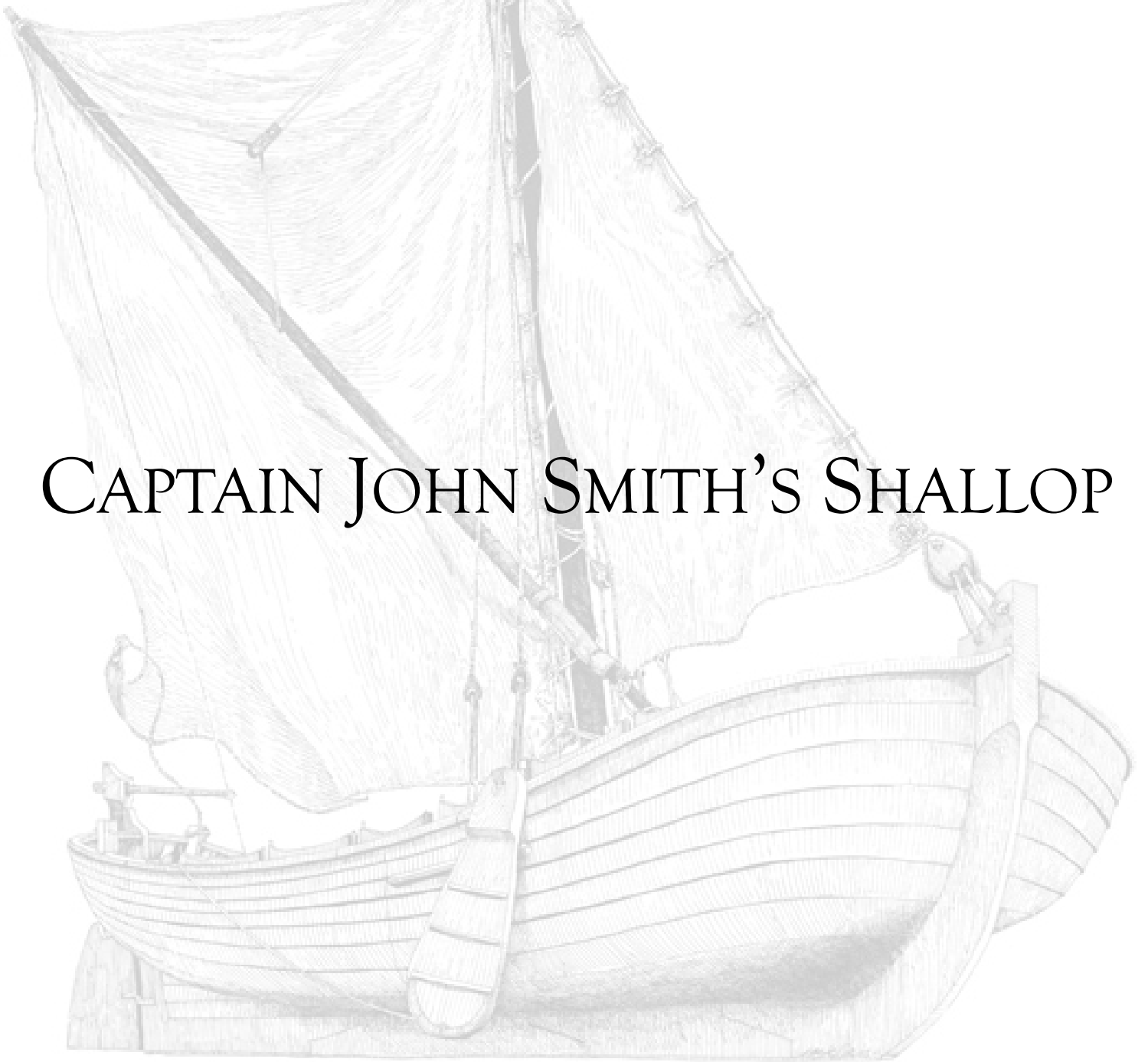


CAPTAIN JOHN SMITH 400 PROJECT CURRICULUM UNIT

CAPTAIN JOHN SMITH'S SHALLOP



Rendering of Sultana Projects' replica of Captain John Smith's shallop courtesy Marc Castelli, produced in consultation with Master Shipwright John Swain

TITLE: Captain John Smith's Shallop

DEVELOPED BY: Chris Cerino, Sultana Projects, Inc.

GRADE/S: 4/5

CLASS PERIODS/DURATION: 2/3

VSC STANDARDS/INDICATORS:

SOCIAL STUDIES GRADE 4

3.C.1 Explain how transportation and communication networks link places through the movement of people, goods, and ideas

- a. Explain how changes in transportation and communication led to the growth and development of towns and cities in Maryland

SOCIAL STUDIES GRADE 4

F. Analyze social studies information

1. Interpret primary and secondary sources of information

OBJECTIVE:

Students will be able to:

- identify and describe a shallop
- give examples of how shallops were used by the colonists
- identify various parts of a shallop
- compare Captain John Smith's shallop to an Indian dugout canoe

VOCABULARY:

<i>shallop</i>	a small, stoutly built workboat capable of being powered by oars and sails
<i>barge</i>	military term for a small, open boat
<i>shipwright</i>	a person who is an expert at ship construction
<i>keel</i>	the large timber at the bottom of a ship which serves as the vessel's backbone
<i>tiller</i>	a long wooden handle in the stern used to steer a ship
<i>rudder</i>	a large flat piece of wood that is attached to the tiller; as the rudder moves from side to side it causes the vessel to turn
<i>main sail</i>	the largest sail on the vessel which supplies the majority of power
<i>staysail</i>	the smaller sail near the bow that is attached to a cable (or stay)
<i>shrouds</i>	rope cables that help to secure the mast
<i>stays</i>	cables that run fore and aft and also help to secure the mast/s
<i>mast</i>	the large, vertical timber near the center of the vessel to which the sails are attached
<i>bow</i>	the front of the ship
<i>stern</i>	the rear of the ship
<i>oar locks</i>	areas along the sides of the ship where an oar is placed and secured
<i>sprit</i>	the timber that holds the uppermost corner of the main sail in place
<i>dugout canoe</i>	a canoe made with a single log by burning the timber with a controlled fire, then scraping out the coals with stone tools and shells. When John Smith sailed up the Bay in 1608, this was the type of vessel used by the local Indian tribes.

MATERIALS/RESOURCES:

Teacher:	Transparency #1	<i>Captain John Smith's Shallop</i>
	Transparency #2	<i>Captain John Smith's Shallop: Parts of the Ship</i>
	Transparency #3	<i>The Two Pieced Shallop: How Did it Work?</i>
	Transparency #4	<i>The Final Phases of Construction for John Smith's Shallop</i>
Students:	Handout #1	<i>Captain John Smith's Shallop</i> (1 per student)
	Handout #2	<i>Captain John Smith's Shallop, Parts of the Ship</i> (1 per student)
	Handout #3	<i>Building the Replica of John Smith's Shallop</i> (1 copy per group)
	Handout #4	<i>Building a Dugout Canoe</i> (1 copy per group)
	Handout #4a	<i>Compare and Contrast: John Smith's Shallop vs. Indian Dugout</i> (1 copy per group)

TEACHER BACKGROUND:

When the first English explorers came to the New World in the late 1500s and early 1600s, they quickly discovered a need for small, versatile, heavily constructed workboats that would enable them to safely explore the coastline and conduct trade with the American Indian tribes of the region. The vessel they designed specifically for this purpose was known as a shallop.

Shallops played an essential role in the survival of the first settlements in the New World. They were used to explore and map the coast line, transport people from one location to another, and deliver trade goods that were exchanged with local Indian tribes for food and other critical supplies. Shallops were generally between 25 to 45 feet in length and could be powered by both oars and sails. They usually had one or two masts, at least one sail, and six to eight oar locks. They were capable of carrying up to 25 men and several days worth of food. One of the interesting aspects of these early shallops is that they were often constructed in a "knock down" fashion - they were pre-fabricated in Europe, disassembled, then shipped to the New World in pieces on the large ocean going ships that delivered the Englishmen across the Atlantic. Once landfall was made, the sailors would quickly reassemble their shallop and begin exploring and mapping the coastline.

On June 2, 1608, Captain John Smith manned Jamestown's shallop with a crew of 14 explorers and set out on a journey to explore and map the Chesapeake Bay. Traveling over 1,700 miles in just over three months, Smith and his men witnessed a Chesapeake that is scarcely imaginable today, with its incredible ecosystem intact and a wide array of American Indian tribes thriving along its shores. In April 2005, Sultana Projects, Inc. - a small, non-profit organization in Chestertown, MD known for owning and operating the 1768 schooner Sultana - began a three year educational initiative entitled the *Captain John Smith 400 Project* to commemorate the 400th anniversary of this historic voyage. In 2005, a replica of Smith's shallop was constructed at the Sultana Shipyard in Chestertown. In 2006, the shallop will be exhibited in museums throughout the region before setting off from Jamestown in 2007 with a crew of modern historians to retrace the routes of Smith's 1608 voyages. To learn more about this project with your students, visit www.johnsmith400.org.

In the next three days, students will learn about shallops and the important role that they played in the early colonial period. After completing these lessons, students will be able to identify a shallop, define what it is, label its various parts, discuss how shallops were constructed, and compare and contrast the European shallop to the Indian dugout canoes that John Smith and his men encountered during their voyages.

LESSON DEVELOPMENT:

1. Start the lesson by projecting the transparency entitled *Captain John Smith's Shallop* (Transparency #1). Tell the students that this is an example of one of the first types of ships used by early European explorers in North America. Have the students describe what they see.
2. Provide the students with guiding questions such as:
 - How do you think a vessel like this would have been used by the colonists? Was it used for work or for pleasure?
 - Was this boat designed to make long ocean going voyages or shorter journeys along the coast?
 - Note that this boat was 28'6" long. How many people do you think it could carry?
 - How much cargo could it hold?
 - How was the boat powered?
 - How was it steered?
 - What materials were used to make it?
 - How would you describe the shape of this boat?
 - Do you think this boat was fast? slow? somewhere in between? Why?

Once the students have described the vessel, tell them that it is a type of boat called a shallop. Shallops were amongst the first workboats used in the American colonies. In 1608, Captain John Smith and 14 English explorers set out in a shallop to explore and map the Chesapeake Bay. Tell the students that today they will be learning more about these important little boats.

3. Pass out copies of the handout entitled "*Captain John Smith's Shallop*" (Handout #1). Read the handout as a class. Then have the students answer the comprehension questions on the second page of the handout. Review the answers orally as a large group.
4. Next show the students the transparency entitled "*Captain John Smith's Shallop: Parts of the Ship*" (Transparency #2). Have the students point out some of the different parts of the shallop. See if they can figure out how each part was used. For homework, have the students read the handout entitled "*Captain John Smith's Shallop: Parts of the Ship*" (Handout #2) and fill in the definitions on the second page.
5. Review the homework as a class. When you are finished, check for understanding by projecting the unlabeled transparency of the shallop on the screen and see if the students can name different parts of the ship as you point to them.
6. Introduce the concept of the two pieced shallop by projecting the transparency entitled "*The Two Pieced Shallop: How Did it Work?*" (Transparency #3) onto the screen. Review the different aspects of this diagram with your class.
7. Inform the students that a replica of the two-pieced shallop they were just examining was constructed in Chestertown, MD by Sultana Projects, Inc in 2005. Today they are going to be looking at photographs taken during the construction phase. Divide the students into groups of five. Give each group a copy of the handout entitled "*Building the Replica of John Smith's Shallop: Step by Step*" (Handout #3). Allow the students ten minutes to look at the photographs and carefully review the different steps involved in re-constructing this vessel. Next have each group fill out the worksheet in which they are asked to describe what is happening in the images and predict what the shipwrights will have to do to finish the project. Review the students'

responses orally in class.

8. Show the students the transparency entitled *The Final Phases of Construction for John Smith's Shallop* (Transparency #4) depicting the vessel's last days at the Sultana Shipyard and its launch on November 4, 2005. Note that only half of the vessel was placed into the water! Tell the students that Sultana Projects did this to illustrate how a two-pieced shallop would have worked when the first English settlers reached the mouth of the Chesapeake Bay on April 26, 1607.
9. Divide the students into groups of five. Inform them that when the English arrived on the Chesapeake Bay in 1607, they found the local Indians navigating the waters in massive dugout canoes. Tell the students that they are going to look at an engraving from the late 1500s that shows how these canoes were made. Under the image is a quote from Captain John Smith's journal in which he describes the construction process. Pass out one copy of the handout "*Building a Dugout Canoe*" (Handout #4) and give the students five minutes to carefully examine the engraving and read the quote. Lead a discussion in which the students compare the Indian canoes and their construction techniques to the English shallop/s.

ASSESSMENT:

Hand each group a copy of the Venn Diagram entitled "*Compare and Contrast: John Smith's Shallop vs. Indian Dugout Canoe*" (Handout #4a). Have each "team" work together to fill in the diagram. After fifteen minutes, have a discussion in which each group reports its findings.

CLOSURE:

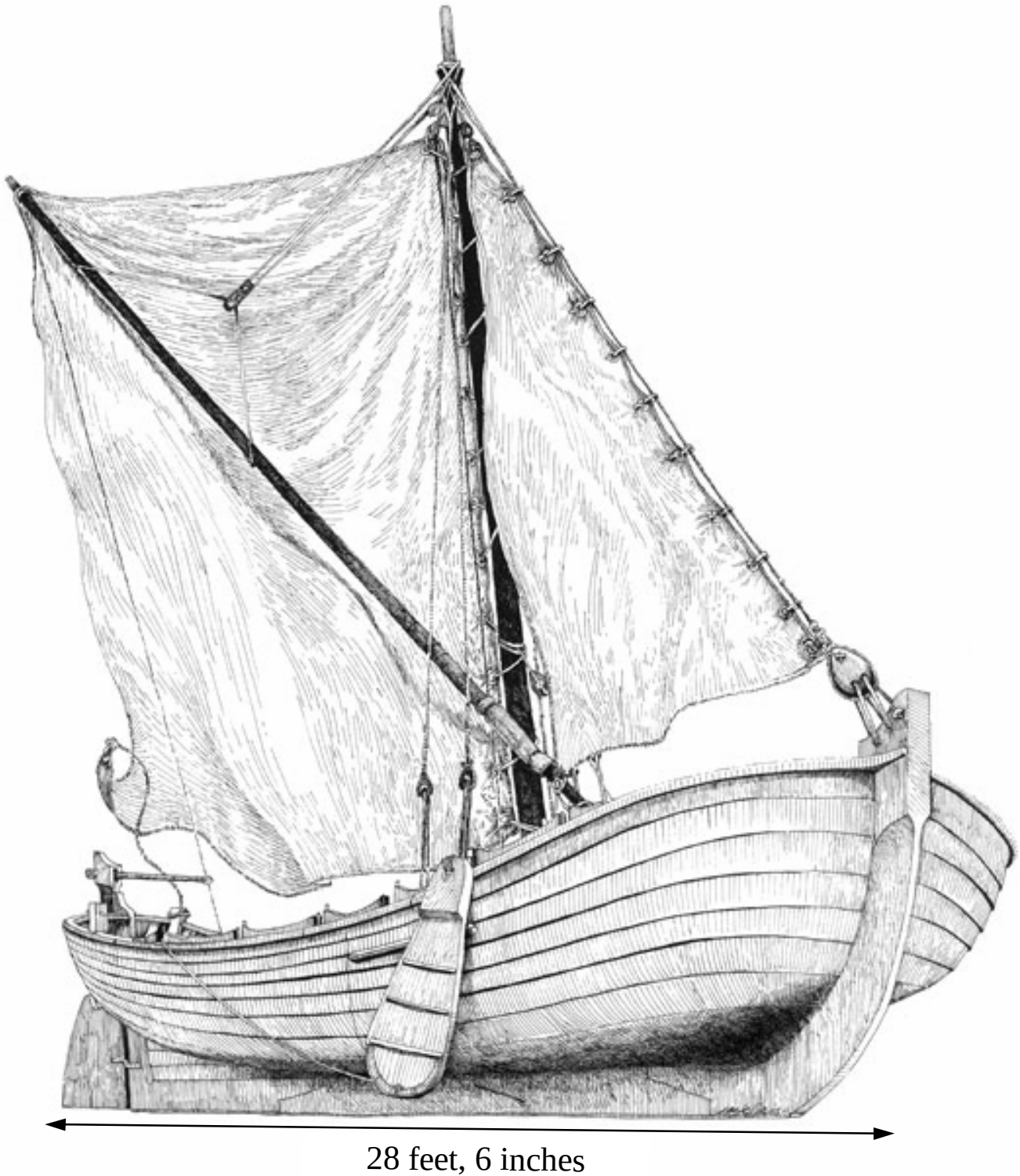
Discuss what the students learned about shallops. Have each student share one new thing they learned about these small, important boats. Inform the students that without shallops, it would have been very difficult for the English to survive in the New World.

EXTENSION:

Here are some ways you could extend this lesson further:

- Have the students visit the *Captain John Smith 400 Project* web site at www.johnsmith400.org. Students will be able to view construction photographs and learn about future plans for the replica shallop. There is also a high-resolution copy of John Smith's 1612 map of the Chesapeake Bay and information about his historic voyage/s. Finally, students can view the itinerary for the 2007 re-enactment voyage.
- Have the students formulate questions they still have about shallop construction and email to Sultana Projects, Inc. at education@sultanaprojects.com.
- Mark off an outline of the shallop on the classroom floor. The vessel was approximately 28 feet long and 7 feet wide and shaped like a long oval. Place 15 students inside the diagram. Have them imagine living and sleeping within that space for three months.
- Have the students write a journal entry in which they pretend to spend a day exploring the Chesapeake Bay in the shallop. Make sure they incorporate descriptions of the boat, new vocabulary words that describe the parts of the vessel, and descriptions of the American Indian dugout canoes that they see.

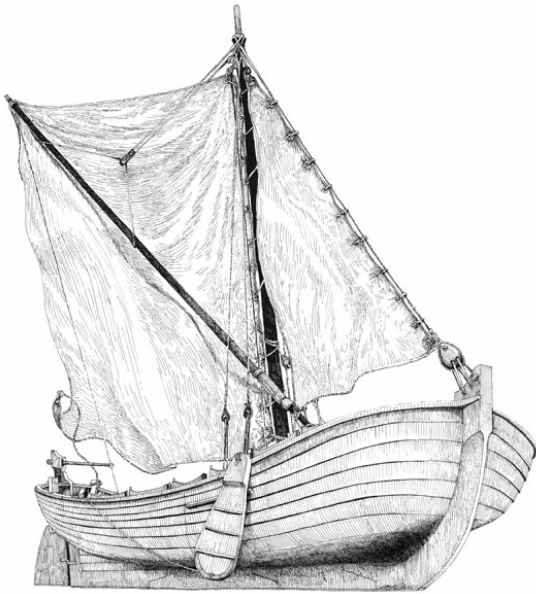
CAPTAIN JOHN SMITH'S SHALLOP



as conceived by Sultana Projects, Inc.

Illustration of Captain John Smith's shallop courtesy Marc Castelli, in consultation with Master Shipwright John Swain

CAPTAIN JOHN SMITH'S SHALLOP



The shallop shown above contains one mast, two sails, and eight oar locks. Shallops played an important role in trade, transportation and exploration.

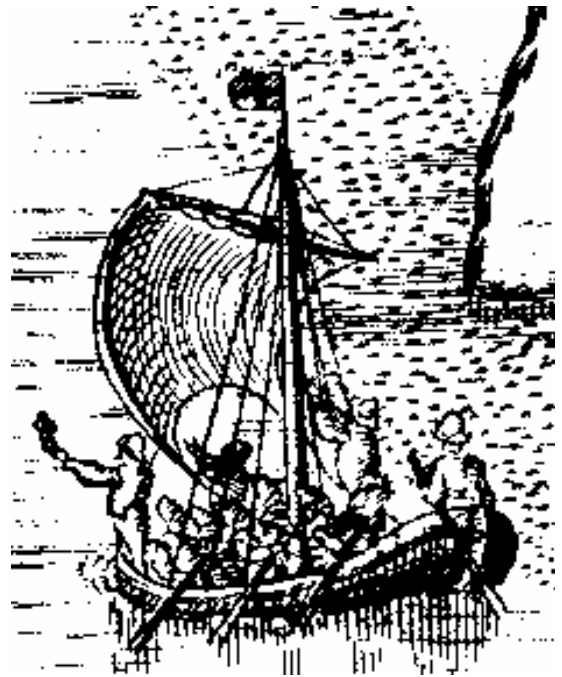
On June 2, 1608, Captain John Smith manned a small, open boat with 14 men and set out on a voyage to explore and map the Chesapeake Bay. Traveling over 1,700 miles in just over three months, Smith and his men witnessed a Bay that is hard to imagine today, with huge schools of fish filling the waters, geese and ducks filling the air, oyster bars and grass beds thriving along the bottom, and hundreds of American Indian villages lining the shore. In 1612, John Smith took the notes and sketches he made during this exploration and created the first accurate map of the Chesapeake region.

The type of vessel Smith and his fourteen crew members sailed was known as a shallop. A shallop is a small workboat that can be powered with oars and sails. Shallops usually had one or two masts and could range from 25 to 45 feet in length. They were much smaller than ships that sailed across the ocean, but large enough to hold up to 25 men and several days worth of food and water.

Shallops were very important to the early English explorers. They were used to map the coastline and transport people from one place to another. They also played an important role in carrying out trading missions with local Indian tribes. During his voyage of 1608, Captain Smith loaded the shallop with beads, bells, looking glasses and other items that were traded with the Indians for corn, fish, meat, animal skins and furs. In later years, shallops served as fishing boats in North America.

One of the interesting things about Captain John Smith's shallop was that it was built in Europe, broken down into pieces, then placed in the hold of one of the large ships that was heading for the "New World". When the Englishmen reached the mouth of the Chesapeake Bay in April 1607, they hoisted the pieces of their shallop onto the beach and spent two days putting it back together. The shallop was then used to explore the lower Chesapeake and select the site of the Jamestown fort.

While shallops are rarely seen on the Chesapeake Bay today, they played a very important role in 17th century society. Without shallops, it would have been much more difficult for the English to survive in the "New World".



This image, taken from a map of the Carolina coast made in the late 1500s, shows English explorers approaching the shoreline in a shallop.

NAME: _____ DATE: _____

CAPTAIN JOHN SMITH'S SHALLOP

DIRECTIONS: Read the passage on the previous page, then answer the questions below in complete sentences.

1. When did Captain John Smith explore the Chesapeake, and how far did he travel?

2. What type of boat did John Smith use during his voyage?

3. In the space below, briefly describe a shallop.

4. What were three ways shallops were used by Englishmen in the "New World"?

5. What was unique about Captain John Smith's shallop?

NAME: _____ DATE: _____

CAPTAIN JOHN SMITH'S SHALLOP - ANSWER KEY

DIRECTIONS: Read the passage on the previous page, then answer the questions below in complete sentences.

1. When did Captain John Smith explore the Chesapeake, and how far did he travel?

Captain John Smith began his exploration of the Chesapeake Bay on June 2, 1608.

He traveled over 1,700 miles in three months.

2. What type of boat did John Smith use during his voyage?

Captain John Smith used a shallop during his voyage of exploration on the Bay.

3. In the space below, briefly describe a shallop.

A shallop is a small vessel that can be powered by oars or sails. They generally had

one or two masts and ranged in length from 25 to 45 feet. Shallops were known to carry

up to 25 men at a time.

4. What were three ways shallops were used by Englishmen in the "New World"?

Shallops were used to explore and map the coastline, carry out trading missions, and

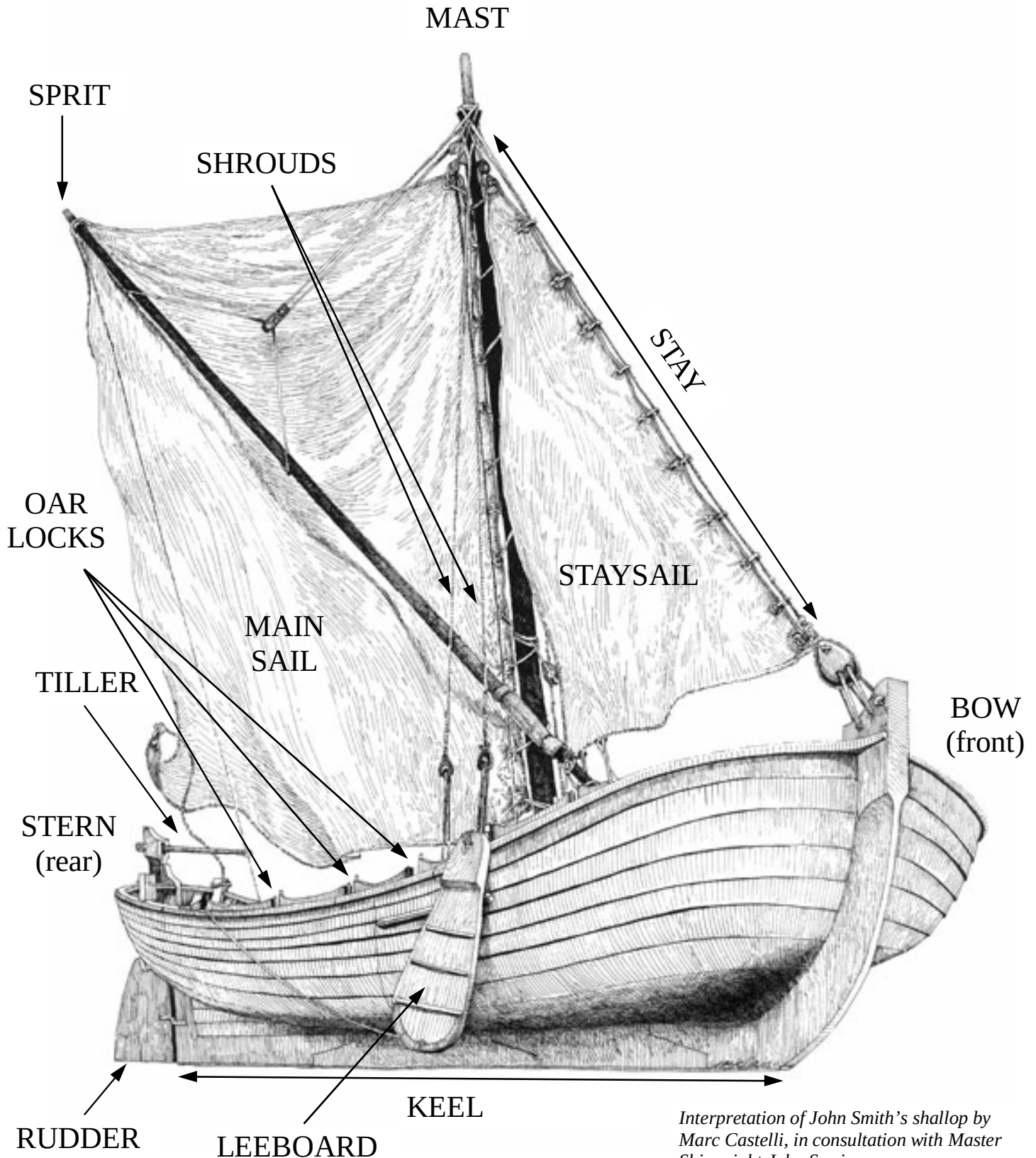
transport people from one place to another.

5. What was unique about Captain John Smith's shallop?

Captain John Smith's shallop was shipped to the New World in pieces, then quickly

reassembled at the mouth of the Chesapeake Bay.

CAPTAIN JOHN SMITH'S SHALLOP: PARTS OF THE SHIP



CAPTAIN JOHN SMITH'S SHALLOP:

PARTS OF THE SHIP

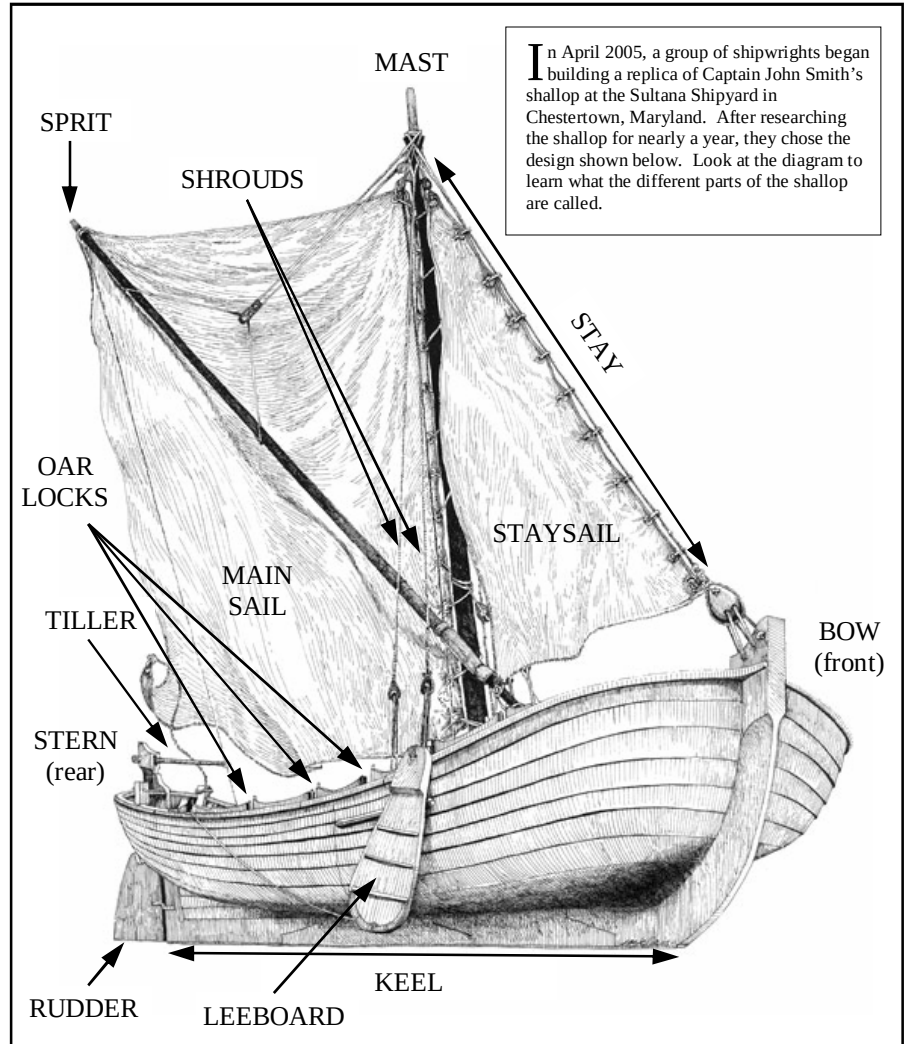
Shallops of the 1600s came in many shapes and sizes. Some were only 25 feet in length, while others were well over 40 feet long. Some had one mast and a single sail, while others had two or more masts and several sails. The shallop shown below was designed by shipwrights at Sultana Projects, Inc. in Chestertown, Maryland for the *Captain John Smith 400 Project*, an educational program that will mark the 400th anniversary of John Smith's explorations of the Chesapeake Bay.

Sultana Projects' shallop has a single **mast**. The mast is a vertical timber near the center of the shallop to which the sails are attached. The small sail near the **bow** (front) of the ship is called the **staysail**, and the larger sail near the **stern** (back) of the ship is called the **main sail**. The upper corner of the main sail is held in place by a timber known as the **sprit**. The mast is held in place by strong rope cables called **shrouds**. Another cable which keeps the mast secure is known as the **stay**, which runs from the bow to the top of the mast.

Sultana Projects' shallop is steered with a long wooden handle known as the **tiller**. The tiller is attached to the **rudder**, which is a large flat piece of wood that moves back and forth, causing the vessel to turn from side to side. When the vessel is sailing, crew

members lower a device called the **leeboard** over the side to keep the shallop from sliding across the water and veering off course. Another important piece is the **keel**, which acts as the ship's backbone and helps keep the vessel in a straight line while sailing. When the wind is light, the shallop's crew members man the oars and row the ship through the water. The oars fit securely in the **oar locks** located along the top of the rails.

Sultana Projects built this shallop in 2005. In 2006, the vessel will be on display at museums in the Chesapeake region before setting out from Jamestown, Virginia in May of 2007 to re-enact Captain John Smith's historic voyages of 1608.



NAME: _____ DATE: _____

CAPTAIN JOHN SMITH'S SHALLOP: PARTS OF THE SHIP

DIRECTIONS: Read the passage and view the diagram on the previous page, then fill in the spaces below.

Briefly define each part of the shallop:

mast _____

sprit _____

shrouds _____

stay _____

bow _____

stern _____

tiller _____

rudder _____

leeboard _____

keel _____

main sail _____

staysail _____

oar locks _____

What is Sultana Projects planning to do with its shallop once it is completed?

NAME: _____ DATE: _____

CAPTAIN JOHN SMITH'S SHALLOP: PARTS OF THE SHIP - ANSWER KEY

DIRECTIONS: Read the passage and view the diagram on the previous page, then fill in the spaces below.

Briefly define each part of the shallop:

mast large vertical timber near the center of the ship to which the sails are attached

sprit timber that holds the upper corner of the main sail in place

shrouds strong rope cables that hold the mast in place

bow the front of the ship

stern the back of the ship

tiller long wooden handle that is used to steer the ship

rudder large, flat piece of wood which turns from side to side, causing the ship to turn

leeboard large board lowered into the water to keep the ship sailing in a straight line

keel large timber that acts as the ship's backbone

main sail the large sail near the stern which provides most of the ship's power

staysail the small sail near the bow

oar locks spaces where the oars sit when the vessel is being rowed

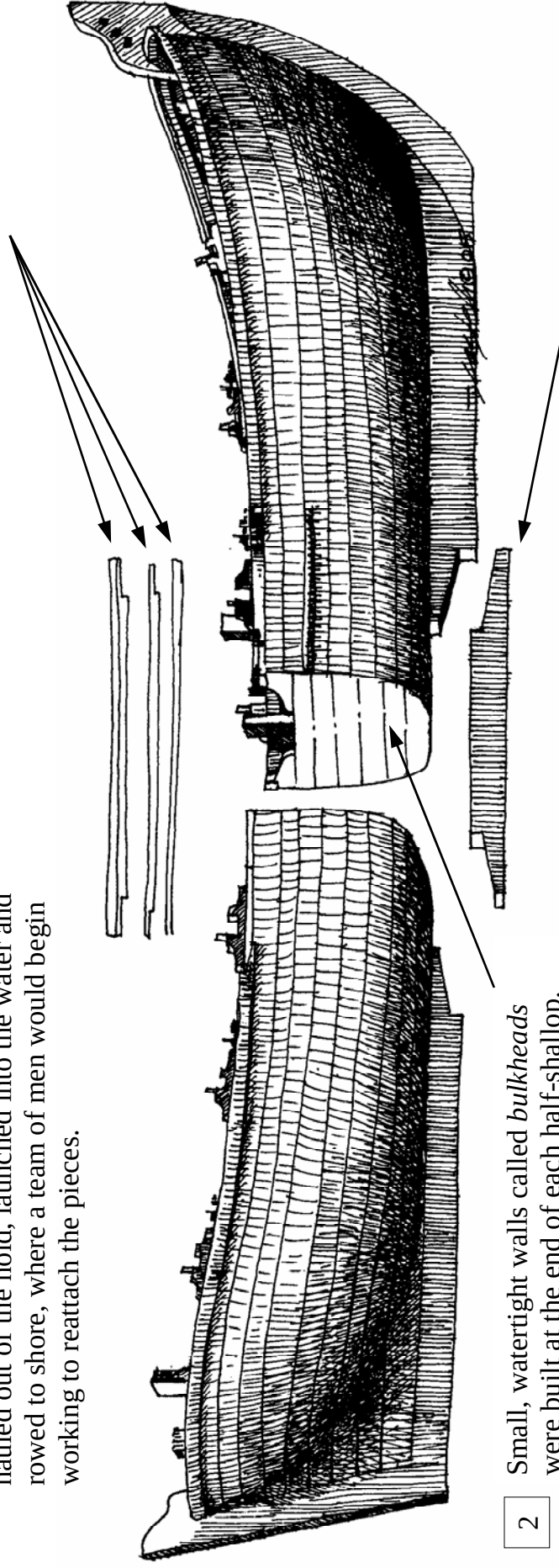
What is Sultana Projects planning to do with its shallop once it is completed?

Sultana Projects' shallop will be on display at museums in 2006. In 2007, the shallop will be used to retrace John Smith's 1608 voyages of exploration.

THE TWO PIECED SHALLOP: HOW DID IT WORK?

1 The shallop was built in England, then sawn in half and shipped to the New World in two pieces. Each piece was capable of floating and being rowed to shore. The shallop would have been stored in the hold of one of the large ocean going ships bringing the Englishmen across the Atlantic. After arriving at the mouth of the Chesapeake Bay, each half was hauled out of the hold, launched into the water and rowed to shore, where a team of men would begin working to reattach the pieces.

4 Before sawing the shallop in half, pre-cut pieces of the top rails were removed. When the shallop reached the New World, these pieces were then reattached on the beach.



2 Small, watertight walls called *bulkheads* were built at the end of each half-shallop. Once the two sections were rowed to the beach, the bulkheads were placed side by side and nailed together.

3 The sturdy piece of wood on the bottom of a ship is called its keel. The two-piece shallop had a special section in the middle of the keel that was removed before the vessel was sawn in half. Once the shallop reached the New World and the two halves were rowed to shore, this special section was reattached.

BUILDING THE REPLICA OF JOHN SMITH'S SHALLOP: STEP BY STEP

In 2005, a group of shipwrights began building a replica of Captain John Smith's shallop at the Sultana Shipyard in Chestertown, Maryland. The photographs below show some of the different steps involved in building the ship. Take a close look at the pictures with your group and discuss what is happening in each photograph. You will then work together to complete the activity on the following page.



WHAT'S GOING ON HERE?

#1 - Two shipwrights use a cross-cut saw to cut down the first oak tree at Elk Neck State Park

#2 - A team of horses hauls the newly cut logs out of the forest

#3 - Shipwright Nick Biles shapes the shallop's keel with a tool called a hand plane

#4 - The shallop's skeleton begins to take shape

#5 - Adding frames (or ribs) to the shallop's keel (or backbone) brings the shape of the boat into view

#6 - Looking from the stern (back of the shallop) toward the bow (front), the frames are now in place

#7 - The ship's skeleton is nearly complete. What needs to happen next?

Photographs courtesy of:

- Michael Wootton
- Sultana Projects, Inc. staff

NAME: _____ DATE: _____

CONSTRUCTING A REPLICA OF CAPTAIN JOHN SMITH'S SHALLOP

DIRECTIONS: Examine the photographs from the previous page. In the space below, write a paragraph which describes the different steps that need to be taken when building a shallop.

The vessel shown on the previous page is still not finished. If you were the shipwright in charge of building this shallop, what do you think the next step/s would be?

NAME: _____ DATE: _____

CONSTRUCTING A REPLICA OF CAPTAIN JOHN SMITH'S SHALLOP - ANSWER KEY

DIRECTIONS: Examine the photographs from the previous page. In the space below, write a paragraph which describes the different steps that need to be taken when building a shallop.

First, trees need to be selected and cut down (image #1). Then the trees need to be hauled out of the woods and brought to the shipyard (image #2). Once the trees are gathered, shipwrights carve the wood with hand tools to make the ship's keel, or backbone (image #3). Frames are then added to the keel one by one, gradually forming the skeleton of the shallop (images #4 and #5). Finally, the frames are stabilized by adding large beams that run horizontally along the side of the ship (images #6 and #7).

The vessel shown on the previous page is still not finished. If you were the shipwright in charge of building this shallop, what do you think the next step/s would be?

The next steps would be to cover the outside of the vessel with wooden planks to make the shallop watertight. The shallop would then need to be moved to the waterfront and launched.

THE FINAL PHASES OF CONSTRUCTION FOR JOHN SMITH'S SHALLOP



WHAT'S GOING ON HERE?

#1 - Shipwrights and volunteers work to put planks on the shallop's hull to make it watertight.

#2 - The shallop is fully planked and ready for launch!

#3 - On November 4, 2005, the shallop was launched in Chestertown in front of several thousand people. If you look carefully at the photograph, you will notice that only the rear half (stern) of the shallop was launched! This is because John Smith's shallop was shipped from the New World in pieces, then quickly put back together when the first settlers arrived at the mouth of the Chesapeake Bay on April 26, 1607.

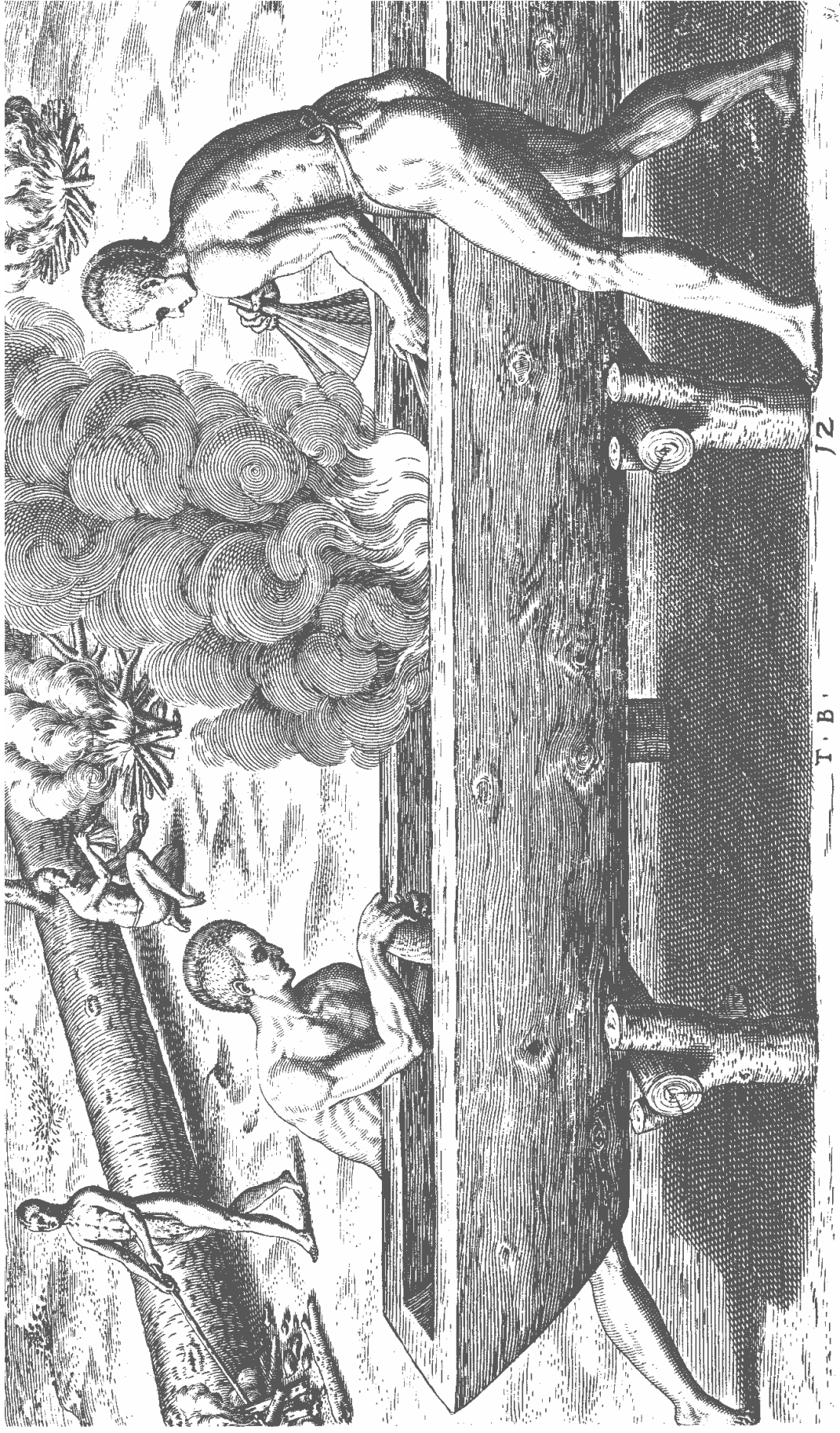
#4 - Shipwright John Swain and two volunteers row the "half shallop" on the Chester River. The two halves were quickly put back together and the boat began a "Museum Tour" in 2006. In 2007, the shallop will be manned with a crew of 14 modern explorers to retrace Captain John Smith's 1608 voyages on the Chesapeake.

Photographs courtesy of:

- Michael Wootton (#2, #3, #4)
- Martha Ann Dooley (#1)



BUILDING A DUGOUT CANOE



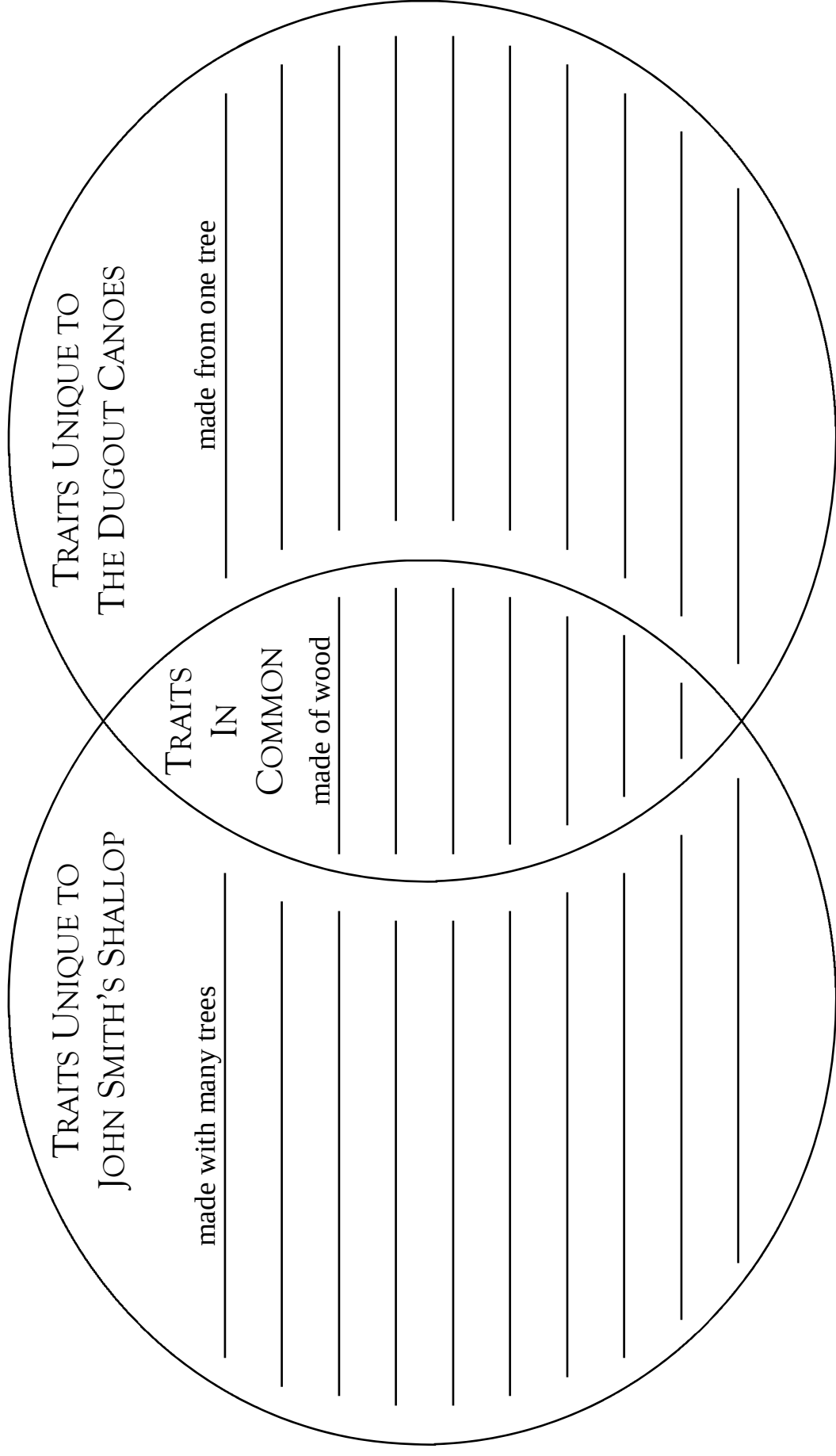
"Their fishing is much in Boats. These they make of one tree by burning and scratching away the coales with stones and shells, till they have made it in the form of a Trough. Some of them are an elne deepe, and fortie or fiftie foote in length, and some will beare 40 men, but the most ordinary are smaller, and will beare 10, 20, or 30, according to their bignesse. In stead of Oares, they use Paddles and stickes, with which they will row faster then our Barges

-Captain John Smith, A Description of Virginia

NAME: _____ DATE: _____

COMPARE AND CONTRAST: JOHN SMITH'S SHALLOP VS. INDIAN DUGOUT CANOE

DIRECTIONS: After looking at the image and reading John Smith's quote on the handout *Building a Dugout Canoe*, compare and contrast the Indian canoes to John Smith's shallop. On the left hand side of the diagram, write down traits that are unique to the shallop. On the right hand side, list traits that are unique to dugout canoes. In the middle write down traits that both vessels have in common. Think about each vessel's appearance, how they were built, the materials that were used, how they were powered, and how they were used by their owners. Some examples have been listed for you.



NAME: _____ DATE: _____

COMPARE AND CONTRAST: JOHN SMITH'S SHALLOP VS. INDIAN DUGOUT CANOE

ANSWER KEY

HERE ARE A FEW POSSIBLE RESPONSES FOR THIS EXERCISE.

