Document A

Source: Dennis B. Blanton, "Jamestown's Environment," Center for Archaeological Research, College of William & Mary, Williamsburg, Virginia, 2000.

Many people have commented over the last four centuries on the qualities of Jamestown's environment....

Because the adjacent river and creeks became brackish as water levels rose, reliable sources of fresh water would have been scarce by the seventeenth century ..., English colonists dug shallow wells to supply themselves with sources of drinking water, but these were vulnerable to drought and salt water intrusion. Also, historian Carville V. Earle attributed ... disease in the early years to Jamestown's position at the salt-fresh water transition, where filth introduced into the river tended to fester rather than flush away.

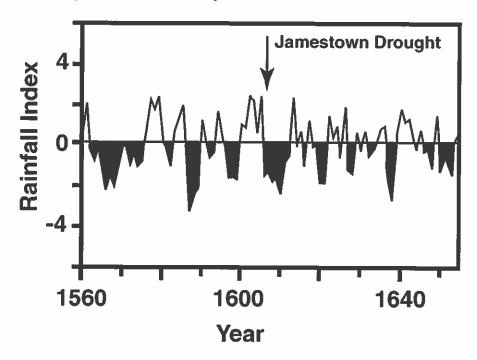
The island is not situated at a point of great natural food abundance, especially relative to other locations very close by.... Fish are present in local streams, but only in the spring and early summer are they there in impressive abundance....

- 1. What is brackish water?
- 2. What twice daily event would cause water levels around Jamestown to rise and cause wells and fresh water streams to become brackish? (Hint: The moon)
- 3. According to Carville Earle, what happened to human waste that got dumped into the river?
- 4. What inference can you make about the effect of tides on health in Jamestown?
- 5. Consider the last paragraph. What time of the year do you think starvation was most likely to happen?

Document B

Source: Adapted from "The Lost Colony and Jamestown Droughts," Science, April 24, 1998.

Note: This study determined rainfall amounts by examining tree-ring patterns in old cypress trees growing near Jamestown. Every year leaves a growth ring inside the trunk of a tree. A wider ring indicates plenty of rainfall and good growth. A narrow ring usually means less rain. "0" on the chart means average tree-ring size and therefore average rainfall.



- 1. What is indicated by a sharp spike below the 0 line? What were the dates of the first five years of settlement in Jamestown? (See Background Essay)
- 2. Look at the years 1580 to 1640. During which period did Jamestown suffer its longest unbroken period of drought?
- 3. In the winter of 1609-1610, Jamestown experienced what settlers called the "starving time." Based on this document, what inference can you make about the cause of this "starving time"?
- 4. Is there any way lack of rain might strain English relations with the Powhatans? Explain.

Document C

Source: Adapted from John Smith, The Generall Historie of Virginia, New England, and the Summer Isles, Book III, 1624.

First and Second Jamestown Ship Lists			
Occupation	Original Settlers May 1607	1st Resupply January 1608	
Council (governors)	6	1	
Gentlemen	47	28	
Labourers	12	21	
Cooper (barrel maker)	0	1	
Carpenter	4	0	
Blacksmith	1	1	
Sailer (sail maker)	1	0	
Barber	1	0	
Bricklayer	1	0	
Mason	1	0	
Tobacco pipe maker	0	1	
Tailor	1	6	
Drummer	1	0	
Preacher	1	0	
Boyes	4	0	
Jeweler	0	1	
Refiners and goldsmiths	0	4	
Gunsmith	0	1	
Perfumer (wig maker)	0	1	
Apothecaries (druggists)	0	2	
Surgeon	1	1	
Occupation unknown	28	51	
TOTAL MALE	110	120	
TOTAL FEMALE	0	0	

- 1. How many settlers arrived in May 1607? 1608? How many had known occupations?
- 2. How many of the settlers from either group were female?
- 3. What is a "gentleman"?
- 4. Of the 110 settlers who arrived in May 1607, nearly 70 were dead by December. Is there anything in the ship lists that helps explain why?

Document D

Source: Ivor Noel Hume, The Virginia Adventure, Alfred A. Knopf, 1994.

(In 1609) Francis West and thirty-six men (sailed) up the Chesapeake Bay to try to trade for corn with the Patawomeke Indians.... Although still part of Powhatan's Confederacy, the tribe had seen less of the English than had those closer at hand and with luck might be more friendly. And so it proved.

Though West was able to load his (small ship) with grain, the success involved "some harshe and Crewell dealinge by cutting of towe (two) of the Salvages heads and other extremetyes." The (ship) and her lifesaving cargo returned to (James Towne).... No one doubted that this new supply of grain would help, but it would not be enough to last the winter. On the other hand, decided the ship's crew, it was plenty to get them fatly home to England. So it was that Francis West "by the perswasion or rather by the inforcement of his company hoysed up Sayles" and headed out into the Atlantic, leaving the colonists to the Indians and to God.

- 1. Is this a primary source or a secondary source?
- 2. Why did Francis West sail up the Chesapeake?
- 3. Is there any evidence that the English forced the Indians to trade their grain?
- 4. What eventually happened to the shipload of grain?
- 5. In what ways can you use this document to help answer the question: Early Jamestown: Why did so many settlers die?

Document E

Source: Adapted from J. Frederick Fausz, "An Abundance of Blood Shed on Both Sides: England's First Indian War, 1609-1614," *The Virginia Magazine of History and Biography*, January 1990.

Change of Francis Mark 1911 1 1911 1 4007 1010				
Unronology of English Mortality in Virginia, 1607-1610				
1607	Total Population			
104 colonists disembark at Jamestown Island	104			
2 die in first Indian attack on Fort James	102			
At least 3 more die in Indian ambushes	99			
Summer sickness kills half the colonist	49			
Capt. George Kendall is executed for mutiny	48			
Pamunkeys kill 2 colonists in capturing				
Capt. John Smith, and, at year's end, the				
English in Virginia "were but fortie in all"	40			
1608				
Capt. Newport arrives with 100 men (1st Suppl	v) 140			
	158			
	130			
Newport arrives with 70 colonists (2nd Supply)				
1609-1610				
Only 8 die during well-provisioned winter	192			
	181			
Disease returns, 100 at Jamestown "sickened				
and half the number died"	131			
6 ships bring some 250 people (3rd Supply)	381			
kill "neere halfe"	330			
Of 100 men at Nansemond, Indians kill 50	280			
Powhatan's siege of Jamestown (the "Starving				
Time") kills some 110 colonists from famine	e			
and disease; another 33 slain; 37 desert	90			
	104 colonists disembark at Jamestown Island 2 die in first Indian attack on Fort James At least 3 more die in Indian ambushes Summer sickness kills half the colonist Capt. George Kendall is executed for mutiny Pamunkeys kill 2 colonists in capturing Capt. John Smith, and, at year's end, the English in Virginia "were but fortie in all" 1608 Capt. Newport arrives with 100 men (1st Suppl Capt. Nelson brings 20 in Phoenix; 2 depart Smith reports "many dead, some sick" Newport arrives with 70 colonists (2nd Supply) 1609-1610 Only 8 die during well-provisioned winter 11 colonists die in boating accident Disease returns, 100 at Jamestown "sickened and half the number died" 6 ships bring some 250 people (3rd Supply) Of 120 men stationed near the falls, the Indians kill "neere halfe" Of 100 men at Nansemond, Indians kill 50 Powhatan's siege of Jamestown (the "Starving Time") kills some 110 colonists from faming			

- 1. What is the total number of colonists to arrive at Jamestown by summer of 1609?
- 2. In 1607 and 1608 how many settlers died from disease? How many were killed by Indians?
- 3. What generalization can you make about the numbers and causes of settler death in 1609?
- 4. What can you infer about settler Indian relations from 1607 to 1609?