Succeeding in the New World: Colonial America Engineering Portfolio

This portfolio belongs to:

Explore the Colonies

As you read about each settlement in the slideshow, fill out the column for that settlement on the chart below. If you are unable to find the information, write "Not Known" in the box. (Note that the chart continues on the following page).

Colonial Settlements

Category	Roanoke	Jamestown	Plymouth	New Amsterdam
Physical				
Geography				
Climate				
Crops Planted				
Clops I lanted				

Explore the Colonies (continued)

Category	Roanoke	Jamestown	Plymouth	New Amsterdam
Key Economic Activities				
Challenges Faced				
Accomplishments				
Population Changes (Growth or Decline) and Causes				

Describe a Settlement

What did you learn about early settlements from reading the four case studies? Use the space below to write a summary of the successes and failures colonists had while trying to meet their needs.

Research Features of Your Region

Discuss with your classmates the key advantages and disadvantages of the geography near your proposed settlement. Use these decision trees to take notes on the advantages and disadvantages of your settlement site.

Landforms and Bodies of Water

Advantages	Disadvantages

Climate

Advantages	Disadvantages	

Soil

Advantages	tages Disadvantages	

Research Features of Your Region (continued)

Plants

Advantages	Disadvantages

Animals

Advantages	Disadvantages	

Criteria for a Successful Settlement

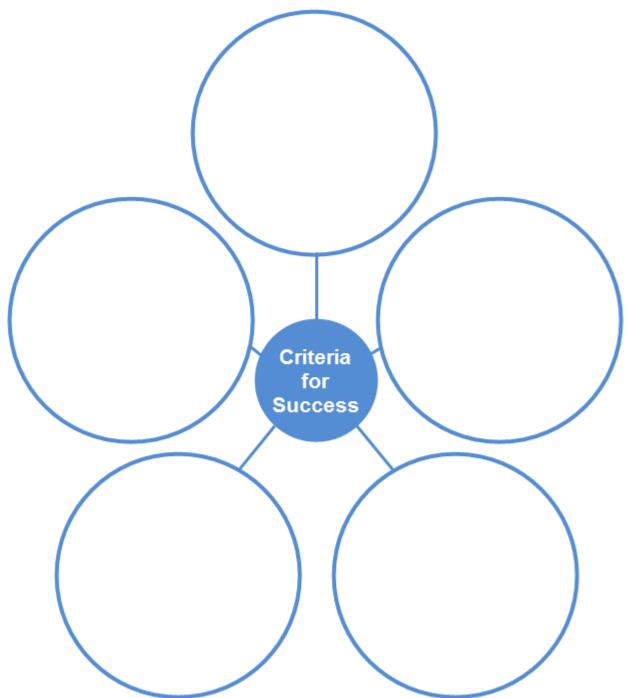
Think about what you learned about other successful and unsuccessful settlements. Complete the mind map on the following page or complete the table on page 8 by listing five key criteria for a successful settlement and the justification for the criteria.

Here is a sample criterion and its justification:

Criteria	Justification
Access to fresh water	Without fresh water, colonists will become sick and many may
	die. In Jamestown, many colonists became sick from drinking salty water and died.

Mind Map

Print this page and write five key criteria for a successful settlement and the justification for the criteria in the circles.



Criteria for a Successful Settlement (continued)

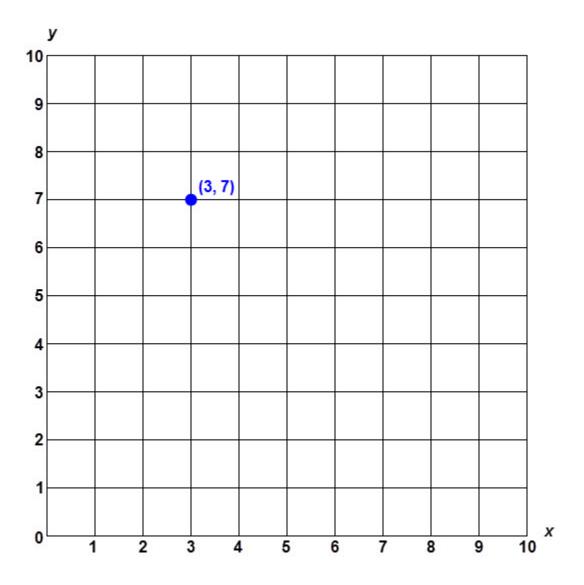
Table (Alternative to Mind Map on page 8)

Criteria	Justification

Print this page and locate each coordinate on the grid and place a dot to mark the location of the coordinate. The first coordinate (3, 7) has been done for you.

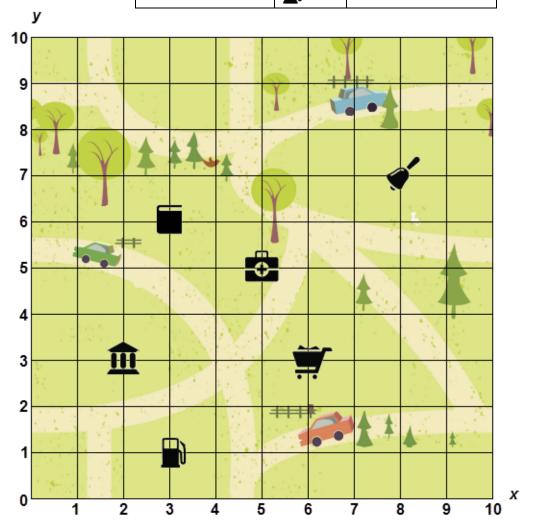
Coordinates

X	У
3	7
2	9
4	4
6	3
2	8
9	5



Locate each symbol on the grid and identify the *x*- and *y*- coordinates for the location of the symbol. The library symbol has been done for you.

Symbol Name	Symbol	Coordinates (x, y)
Library		(3, 6)
Hospital	•	
Super Market	Ť	
School		
Town Hall	Î	
Gas Station		



STEP 1: Prepare for Your Journey

Identify items to take and build a settlement. Enter the quantity of each supply kit from the list. Your supplies cannot exceed 10,000 pounds. To calculate the total weight for each supply kit, multiply the quantity times the pounds for each kit. Finally, add all of the values in the Total Weight column together to ensure that the weight of your supplies is less than 10,000 pounds.

Supply Kit	Quantity	Total
Supply Kit for 100 Colonists (15 families and 25 single men)		Weight
Household Kit (150 pounds): This kit includes building tools,		
hunting tools, warm clothes, light-weight clothes and cooking		
utensils. It satisfies household needs for building and living in 5		
homes. One home would accommodate a family of 3 - 5		
individuals.		
Leader Household Kit (75 pounds): This kit includes building		
tools, hunting tools, warm clothes, light-weight clothes, cooking		
utensils, trading items and writing instruments. It satisfies		
household needs for building and living in one home for the		
leader of the colony and his family (3 - 5 individuals).		
Doctor Kit (75 pounds): This kit includes building tools, warm		
clothes, light-weight clothes, cooking utensils and medical		
supplies. It satisfies household needs for building and living in		
one home for the doctor of the colony and his family (3 - 5		
individuals).		
Church/School Kit (100 pounds): This kit includes building		
tools, bibles, books and school materials. It satisfies the needs for		
building one church/schoolhouse to meet the spiritual and		
educational needs of the community.		
Storeroom Kit (400 pounds): This kit includes building tools,		
emergency tools and food rations. It satisfies the needs for		
building one storeroom and enough supplies for six months for		
half of the population.		
Livestock Kit (1,500 pounds): This kit includes 1 cow or 5		
goats, and it satisfies the needs for building and maintaining 2		
paddocks/livestock enclosures. Two paddocks can support up to		
16 families for the year.		
Farming Kit (300 pounds): This kit includes seeds and tools for		
planting crops such as wheat, beans and corn. It satisfies the		
needs for planting and maintaining 5 crop fields that would feed		
20 people for a year.		
Gardening Kit (50 pounds): This kit includes seeds and tools for		
planting vegetables and herbs. It satisfies the needs for planting		
and maintaining 5 vegetable gardens that would provide		
vegetables and herbs for 20 people for a year.		

STEP 2: Design Your Settlement

HOMES

Use the Colonial America Settlement Builder to identify locations for your homes. You may also draw symbols on the grid map shown below.

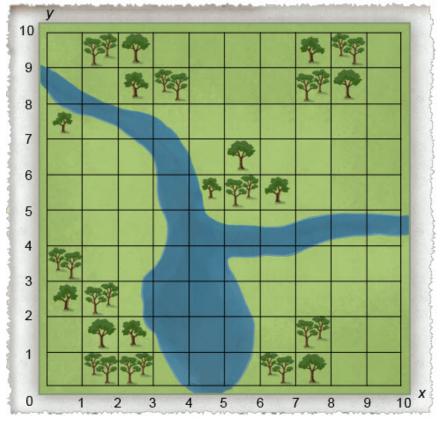
Note that each home symbol on the map represents 5 homes.

Record the coordinates where each set of homes is located.

For example:

Homes			
(3, 4)			
(6, 5)			
(9, 7)			

Record your information in the spaces below. Note that some spaces may remain blank depending on how many sets of homes you have.





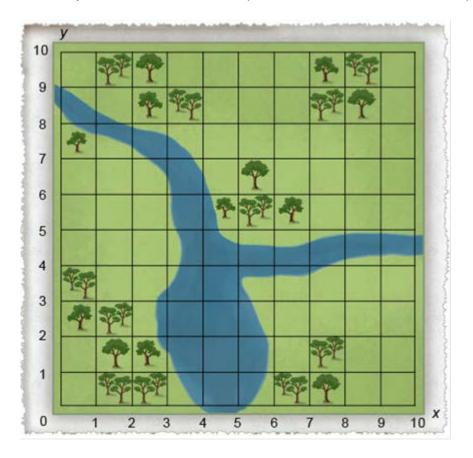
STEP 2: Design Your Settlement

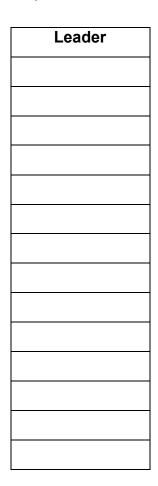
LEADER'S HOME

Use the Colonial America Settlement Builder to identify a location for your leader's home(s). You may also draw symbols on the grid map shown below.

Note that each leader's home symbol on the map represents 1 leader's home.

Record the coordinates where each leader's home is located.





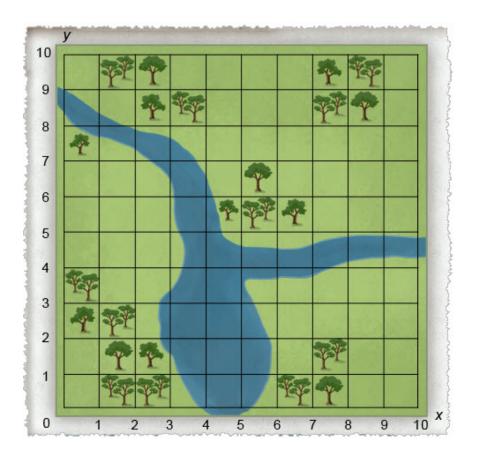
STEP 2: Design Your Settlement

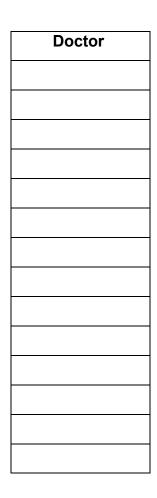
DOCTOR'S HOME

Use the Colonial America Settlement Builder to identify a location for your doctor's home(s). You may also draw symbols on the grid map shown below.

Note that each doctor's home symbol on the map represents 1 doctor's home.

Record the coordinates where each doctor's home is located.





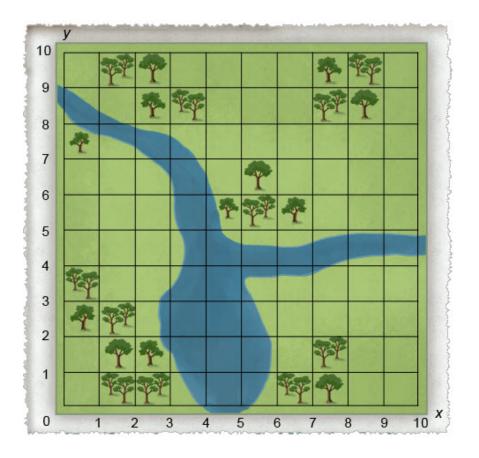
STEP 2: Design Your Settlement

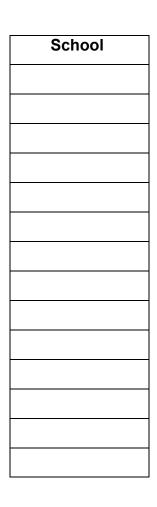
CHURCH/SCHOOL

Use the Colonial America Settlement Builder to identify a location for your church/school(s). You may also draw symbols on the grid map shown below.

Note that each church/school symbol on the map represents 1 church/school.

Record the coordinates where each church/school is located.





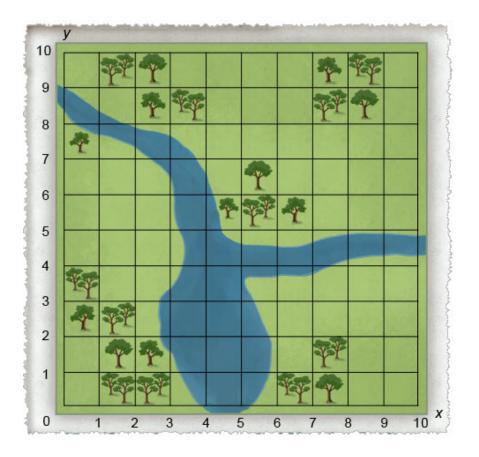
STEP 2: Design Your Settlement

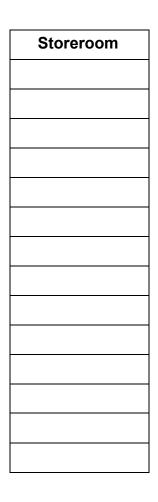
STOREROOM

Use the Colonial America Settlement Builder to identify a location for your storeroom(s). You may also draw symbols on the grid map shown below.

Note that each storeroom symbol on the map represents 1 storeroom.

Record the coordinates where each storeroom is located.





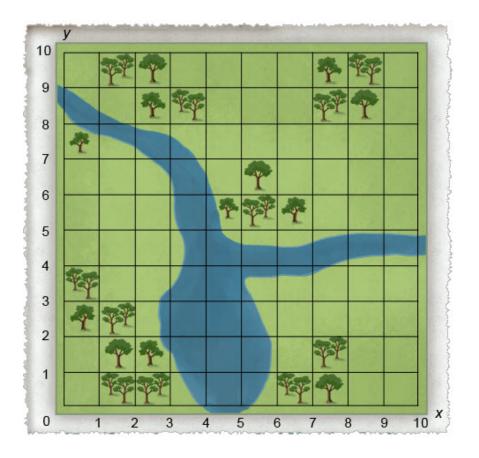
STEP 2: Design Your Settlement

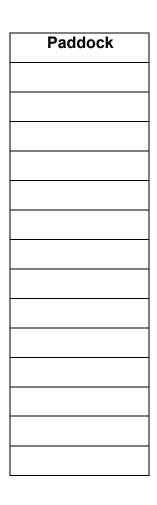
PADDOCKS

Use the Colonial America Settlement Builder to identify a location for your paddocks. You may also draw symbols on the grid map shown below.

Note that each paddock symbol on the map represents 2 paddocks.

Record the coordinates where each set of paddocks is located.





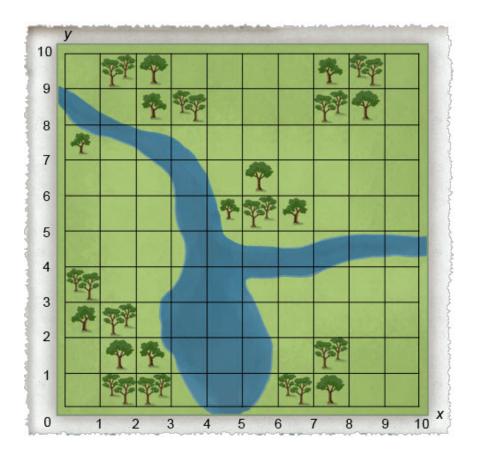
STEP 2: Design Your Settlement

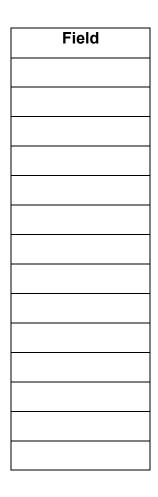
CROP FIELDS

Use the Colonial America Settlement Builder to identify a location for your crop fields. You may also draw symbols on the grid map shown below.

Note that each crop field symbol on the map represents 5 crop fields.

Record the coordinates where each set of crop fields is located.





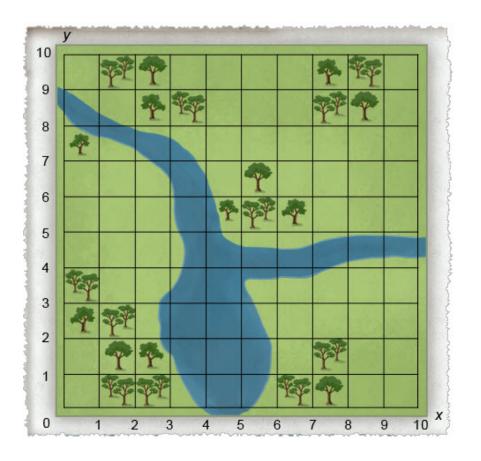
STEP 2: Design Your Settlement

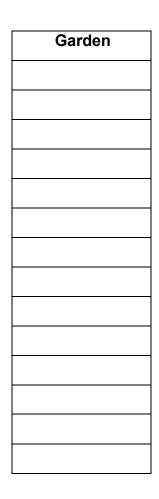
VEGETABLE GARDENS

Use the Colonial America Settlement Builder to identify a location for your vegetable gardens. You may also draw symbols on the grid map shown below.

Note that each vegetable garden symbol on the map represents 5 vegetable gardens.

Record the coordinates where each set of vegetable gardens is located.





STEP 3: Face Your Challenge

The American colonies faced many challenges, including those caused by natural disasters. Click the SPIN button in the Settlement Builder to see which natural disaster will strike your settlement. Record the result of the spin below.

Which disaster struck your colony?

STEP 4: Test Your Settlement

Click the Test button in the Settlement Builder to see the impact of this disaster on your settlement.

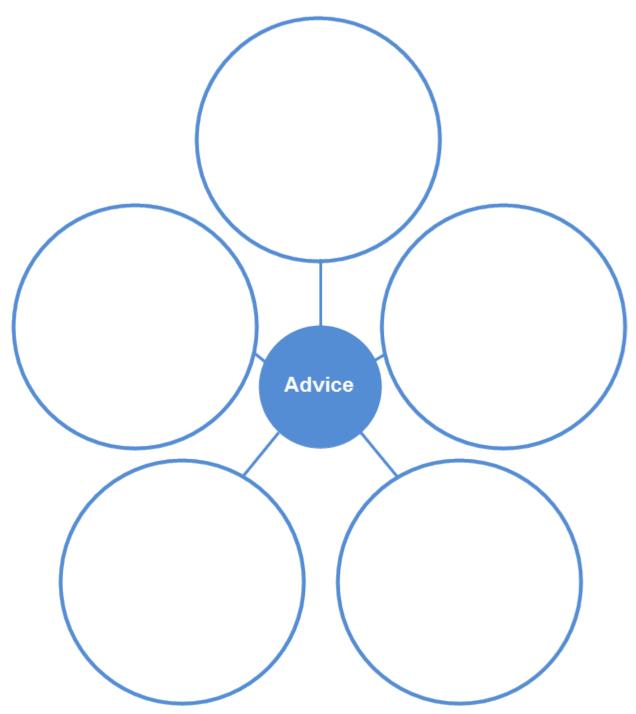
Describe how the disaster impacted your colony.

Did you make decisions for locations of structures based on geographic characteristics?

Will your settlement be able to rebuild and survive off of what was not destroyed?

Brainstorm: Idea Web

Brainstorm for your informational column by filling the idea web with the advice you would give new colonists, or you may choose to record your ideas in the blank space on the next page. Next, as a group, decide which five pieces of advice to include in your column.



Brainstorm: Ideas (Alternative to Idea Web on page 23)

In the space below, record your ideas for advice you would give new colonists.

If I knew then what I know now...

Organize Information

Gather and organize information for your column by working with your group to complete this table. As a group, decide which five pieces of advice to include.

Piece of advice	Supporting evidence from readings	Supporting evidence from simulation	Supporting visual evidence (images, graphs, etc.)

Write Your Informational Column

Use this page to write your rough draft of your column. Be sure to note any images or graphs that you will use in your final text. If more pages for writing are needed, you may use the additional blank pages at the end of this portfolio.

Revise

Revise your column. Reread the column and think about the following:

- Does your writing make sense? Are you missing any important pieces of information?
- Do you include five pieces of advice?
- Do you back up your advice with evidence from your experiences and your reading?
- Do you include images or graphs?

Edit

Edit your Informational Column. Reread the column and think about the following:

- Do you have any misspelled words?
- Are all of your sentences complete sentences?
- Do you have punctuation at the end of each sentence?

Publish

Now you are ready to publish. Type your column or rewrite it neatly. Include your images and graphs.