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GALLEON



A Simulation of the Quest for Gold on the Spanish Main

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PURPOSE

During GALLEON students participate in an adventure which parallels that of 16th century seamen. As crewmen on square-rigged sailing vessels, they face the perils of uncharted waters, storms, deadly calms, scurvy, spoiled food, mutiny, and battle. The student seafarers must analyze various routes and decide which is the most advantageous for them to take. Once this decision has been made, students face events that will give them a realistic view of problems mariners faced on transoceanic voyages. Lessons combine with FATE BULLETINS to simulate situations that arise on their voyages. The simulation provides a basic outline of the history of the Caribbean area during the early exploration and colonization period.

During the simulation, students should experience the following:

Knowledge

1. The events leading to the exploration of the New World
2. The expectations drawing early explorers to the New World
3. The hazards facing those who traveled on the sea X
4. The part gold played in certain areas of European politics

Attitudes

1. Empathy for the tears and frustrations of early voyagers to the New World
2. Despair and exhilaration from dealing with fate
3. Realization of the loss of certain Indian cultures through conquest

Skills

1. Map reading
2. Map making
3. Writing log entries
4. Planning and writing a research report
5. Plotting a course

OVERVIEW

PHASE I

GALLEON begins in European ports in Spain and England. Four or five Spanish crews set sail under orders from their sovereign to voyage to the New World to pick up a treasure and deliver it safely back to Spain. The Spanish ships have three routes available to them. These three routes roughly parallel the first three routes of Columbus. Each crew must decide which route is to its best advantage. At the same time these Spanish ships sail, one lone privateer sets sail from England on orders from its sovereign to disrupt the gold flow from the New World to Spain. The privateer has only two route options. One route will put this ship to the nearest landfall and resupply, but it has adverse winds; the other route has more favorable winds but covers a greater distance.

Each crew must make a route decision and justify it. Each student must write a log entry about his/ her feelings of leaving home under all the given circumstances. Students face an uncertain future when they become becalmed in mid-ocean. Appreciation of their dangerous situation deepens while they write another log entry expressing their fears, anxieties, and attitudes. This becalmed state is heightened within the classroom by a number of days of game activity without ship movement. During this time, students study biographical sketches of some early explorers. They also begin work on their research report. Students get to respond with a different set of emotions when their ships begin moving again. A fourth log entry is written when land is sighted.

PHASE II

This phase begins after each ship has reached its initial destination in the New World. Game activity suddenly becomes more competitive. Open hostility may break out between the privateer and the galleons. During this phase, the ships are free to plot their own courses. Movement is derived from scores made on five question quizzes based on earlier lessons. The challenge to each Spanish galleon is to elude the privateer and be the first ship that returns to a port in Spain. Failing to elude the privateer, each galleon still has the chance to defeat the English crew in battle.

SETUP DIRECTIONS

1. Carefully read all material in this Teacher Guide and the separate Student Guide.
2. Have students help you make a large classroom wall map from the SAILING MAP found in the Student Guide. Make two display copies, one from each half of the map. Project each half of the map onto butcher paper attached to a bulletin board and trace the map's outline and details. If you make this map as large and colorful as possible several days before beginning the simulation, students' interest in GALLEON will be increased.
3. Duplicate a class set of each of the following forms for each student:
 - BACKGROUND HISTORY
 - LOG ENTRY 1
 - NAVIGATION LESSON
 - MINI LESSONS
 - LOG ENTRY 2
 - WRITING A RESEARCH REPORT
 - BIOGRAPHICAL SKETCHES
 - LOG ENTRY 3
 - EMERGENCY MAP-MAKING ASSIGNMENT
 - LOG ENTRY 4
 - PHASE II RULES
 - MOVE QUIZZES
4. Duplicate one copy of the PHASE II MOVE RECORD for each team.
5. Get a shoebox and insert 38 numbered slips (1 to 38) for the 38 FATE BULLETINS in this Teacher Guide.
6. Obtain a pair of dice.
7. Obtain as much resource material as possible related to the 16th century period (e.g., books, pictures, maps, ship models). Place these around the room to stimulate student interest and provide material for research.

This is a sample chart. Alter it as desired.

UNIT TIME CHART

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
PHASE I				
Read/discuss Introduction in Student Guide	Review Student Guide's Introduction Form crews Choose positions Study map Fill out ROUTE DECISION SHEET	Read/discuss BACKGROUND HISTORY: The New World ROUTE DECISION SHEETS returned Read FATE BULLETINS Ship movement pins moved	Write LOG ENTRY 1 Read FATE BULLETINS Ship movement pins moved	NAVIGATION LESSON Read FATE BULLETINS Ship movement pins moved
DAY 6	DAY 7	DAYS 8 & 9	DAY 10	DAYS 11 & 12
PHASE I				
Read and discuss MINI LESSONS Write LOG ENTRY 2 FATE BULLETIN Ship movement	Begin individual RESEARCH REPORTS (Due on Day 14)	Individual RESEARCH REPORTS (Due on Day 14) read and discuss BIOGRAPHICAL SKETCHES	Write LOG ENTRY 3 FATE BULLETINS Ship movement Final addition to LOG ENTRY 3	FATE BULLETINS Ship movement EMERGENCY MAP-MAKING ASSIGNMENT
DAY 13	DAY 14	DAY 15	DAYS 16	FINAL DAY
END OF PHASE I	PHASE II			Debriefing
Write LOG ENTRY 4 FATE BULLETINS Ship movement	RESEARCH REPORTS handed in Study PHASE II RULES Review navigation Practice broadsiding Receive PHASE II MOVE RECORD sheets	Take and correct a MOVE QUIZ Record scores FATE BULLETINS Move ships Broadsideing	Continue procedure in Day 15 for number of classroom hours needed for one galleon to reach Spain	

DAILY DIRECTIONS

PHASE I

These lesson plans are intended only as a guide. You, as a teacher, know the interests, abilities, and limitations of your students; therefore, only you can intelligently modify these plans to meet your students' needs. By utilizing your knowledge of your class, you will be able to alter the daily plans to provide a meaningful learning experience.

DAY 1

Objectives

Students will read the INTRODUCTION in the Student Guide and participate in a class discussion concerning the historical period and the simulation.

Materials

1. Student Guides—*class set*
2. Any related material you have available

Procedure

1. Have students read the INTRODUCTION. (You may choose at your own discretion to read and discuss it with them as you proceed.)
2. Follow the reading with a class discussion of the material covered in the INTRODUCTION. You should use your supplemental related materials here. Topics that could be pursued are:
 - a. **Food** and **water** problem—lack of facilities for keeping food from spoiling, no refrigeration, extreme heat, dampness causing food to mold, weevils, rats, etc.;
 - b. **Disease** problem—scurvy, the disease of the seafarer, caused by a lack of Vitamin C in the diet (available in fresh fruit and vegetables), sailors' diet of salted meat and hard-tack, smallpox on ship, nowhere to go, malaria in the tropics;
 - c. **Navigating** problem—with the astrolabe and cross staff, early mariners could measure latitude, but had no way to measure longitude;
 - d. **Weather** problem—adverse winds, storms, calms, extreme heat, etc.;
 - e. **Time** problem—great time lengths required for voyages, lack of communication, political changes, wars, deaths, etc.; and
 - f. **Unknown** factor—broken masts and rudders, death of key crew members, fires, sickness, disease, pirates, etc.

DAILY DIRECTIONS

Day 2

Objectives

1. Students will learn how to describe a route
2. Students will be placed into crews.
3. Students will choose positions to fill within a crew.
4. Students will be given a destination in the New World.
5. Students will study the map and make a route decision.

Materials

1. SHIP LOG ENTRY—*in Student Guide*
2. ROUTE DECISION SHEET—*in Student Guide*

Procedure

1. Review the INTRODUCTION to cover any unanswered or new questions.
2. Place students into crews. It is not necessary that each crew have the same number of students though each crew must have at least three members. The following guidelines may be helpful to you.
 - a. **Privateer Crew:** For this group you should select a number of very capable, aggressive students who are not afraid of a challenge. These must be capable students if they are to have a chance at winning the game. Be sure to save some of the better students to help round out the galleon crews.
 - b. **Galleon Crews:** There can be more flexibility in choosing these crews. You can simply pick three to five capable captains and let them pick from the rest of the class or throw all remaining names in a box and pick the crews from it. While the number of galleons is not extremely critical to the game, the optimum number seems to be three to five. Again, the number of crew members may vary. What is important is that they can work together.
3. Place the names **Portobelo**, **Cartagena**, and **Veracruz** on separate pieces of paper and have the galleon crews pick them out of a box. The one each crew picks will be that crew's destination—by order of the king of Spain. The privateer's destination is the pirate flag in the Gulf of Mexico.
4. After the crews are established, have each student sign his/her name in one of the ship's positions. (Do not allow anyone to sign for more than one position.)

DAILY DIRECTIONS

5. Have each crew name its ship and make a ship-movement pin. The ship-movement pin should be a ship drawn on fairly stable material such as tag board. It should be no larger than a 25-cent piece. A straight pin driven through it serves to stick it in the map in the appropriate port.
6. Have each crew study the map in the Student Guide and fill out the ROUTE DECISION SHEET. Allow each crew time to discuss the routes among themselves. It is not necessary for each student to fill out this form as it is a group decision. The captain turns in his/her ship's ROUTE DECISION SHEET to you by the end of the day for evaluating.
7. Evaluate the ROUTE DECISION SHEET. Allow a one-dot move for each acceptable advantage or disadvantage listed on the sheet. The maximum number of moves for this round is 12. The moves will not be made on the wall map until the next session. Do not be concerned whether or not crews picked a good or bad route. Fate cards will have the effect of slowing down crews later, if they have made a poor choice.

DAY 3

Objectives

1. Students will read the BACKGROUND HISTORY: The New World handout.
Note: If your text covers this background, you may not wish to duplicate this handout.
2. Students will have the evaluated ROUTE DECISION SHEETS returned.
3. Fates will be read to students and adjustments made on their PHASE I MOVE RECORD sheets.
4. Ship movement will take place on the wall map.

Materials

1. BACKGROUND HISTORY: The New World—*class set or your textbook*
2. Evaluated ROUTE DECISION SHEETS

Procedure

1. Have students read the BACKGROUND HISTORY: The New World. You may choose at your discretion to read it in class and discuss as you proceed.

DAILY DIRECTIONS


2. Follow the reading with a class discussion on the material covered. Again, you may supplement the discussion with any appropriate material you have available.
3. Hand back the evaluated ROUTE DECISION SHEETS and allow the captains time to record the score on their PHASE I MOVE RECORD sheets.

Option: Have each captain select one member from the crew to make a second copy of the PHASE I MOVE RECORD sheet and post it on a bulletin board. Other crews could then examine them daily.

4. Each day movement is made on the map, you will read FATE BULLETINS to simulate events that might occur on the voyage. These fates are important if you wish to have the game continue to be a realistic simulation. Students love FATE BULLETINS, regarding them often as the highlight of the simulation. Before each day begins, review the fates that will be read that day. This will allow you to anticipate where the game is going.

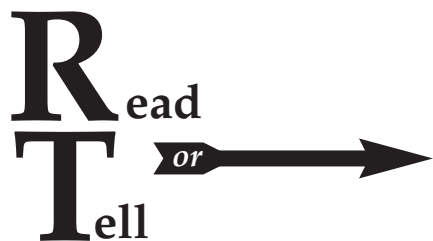
Note: Feel free to add fates of your own to increase your control of events and movement.

5. Read the following FATE BULLETINS and have the ship captains calculate the results.

Read
Tell 

For the privateer

A mixture of warm ocean air has come in contact with cool air off the continental landmass of Europe. This situation has caused a great deal of fog along the continent's western coastline. If you are on the westerly Route 4, you have missed this fog bank. Continue as you were. If you chose the southern route, you have run directly into the fog. Not being able to tell your exact position, you decide to reduce the amount of sail you are carrying. This reduces your speed but makes the travel safer. Flip a coin. Heads—reduce your move by one dot; tails—reduce your move by two dots.



DAILY DIRECTIONS

For Spanish ships

You have encountered a strong northerly wind. It is blowing directly south. If you are headed for Madeira, the wind is blowing you off your intended course. It will take you time to tack back to get on course again. Flip a coin. Heads—reduce your moves by one dot; tails—reduce your moves by two dots. If you are headed for the Canary Islands, the wind is in your favor. Roll one die. Add the amount rolled to your movement.

6. Each crew takes its turn at moving its ship movement pin on the wall map.

DAY 4

Objectives

1. Review BACKGROUND HISTORY: The New World sheets.
2. LOG ENTRY 1: Leaving Home will be completed by students.

Materials

1. LOG ENTRY 1—*class set*

Procedure

1. Review BACKGROUND HISTORY: The New World to cover any unanswered or new questions.
2. Distribute the LOG ENTRY 1 handout. Discuss the entry with students. Briefly answer any questions that arise. Allow each student approximately 30 minutes to write the entry.
3. Collect the LOG ENTRIES. Grade the entries on the basis of their originality and completeness. Ask yourself: Did they meet the requested requirements? This assignment and all future assignments ***you should grade on a scale of 1 to 20***, with 20 being the highest grade. Normal progress of the ships is based on the average student receiving 12, 13, or 14 points on each assignment. If a ship falls short of the goal, some students on that ship may increase their movement by doing an appropriate extra credit assignment.

DAILY DIRECTIONS

Day 5

Objectives


1. Students will have the graded LOG ENTRY 1 returned.
2. FATE BULLETINS will be read.
3. Ship movement will take place.
4. Students will read and complete the NAVIGATION LESSON.

Materials

1. Evaluated LOG ENTRIES 1
2. NAVIGATION LESSON—*class set*

Procedure

1. Return the evaluated LOG ENTRIES to students. You may decide to post some of the better ones on a bulletin board or to read some out loud to the class. This will give other students something to shoot at in the upcoming LOG ENTRIES.
2. Allow the team captains time to record the LOG ENTRY scores on their MOVE RECORD sheets. The final score should be divided by the number of team members that were assigned to write the entry. Of course, adjustment may have to be made for absent crew members; however, an entry that simply was not completed should receive a zero and the zero should then be counted into the average.
3. Check each team's record to be sure scores have been properly averaged.
4. Read the following FATE BULLETINS and have the ship captains calculate the results.

Read
Tell 

For the privateer

You have managed to slip out of the harbor relatively unnoticed. That is good for your mission's sake. Following the directions from your sovereign you now open your orders. They inform you that you are to avoid contact with all westbound Spanish ships in order not to give away your mission. You are told only to attack eastbound ships as these will undoubtedly have treasure aboard. In the meantime, fair winds speed you along. Choose a team member to call the tip of a coin. Every time it is called correctly you may add one dot to your distance moved. If you are on Route 4, you get three chances. If you are heading for Route 1, you get five chances.

Read
Tell

or



DAILY DIRECTIONS

For Spanish ships east of Madeira or Canary Islands

A strong wind blowing off the continent of Africa is causing you to make good headway. Have one member of your team wad up a sheet of paper and throw it at the wastebasket from five meters away. Each basket made adds one dot to your movement. You get five chances.

For Spanish ships that have already reached or passed Madeira or Canary Islands

The good off-continent winds from Africa are tapering off in your location. They are still strong enough to aid you however. Have one team member wad up a sheet of paper and throw it three times at the wastebasket from five meters. Each success adds one dot movement.

5. Allow each ship to make its movement on the wall map.
6. Students will now work on the NAVIGATION LESSON. They should be able to work this out themselves. Encourage each student to do his/her own work. If you have some poor readers in the class you may choose to read it with them. Collect the lessons at the end of the day.
7. Correcting the assignment: On most problems involving students figuring out the grid coordinates you should allow a variance in the answers of at least a degree. If they are using a map other than the one in the Student Guide or the WALL MAP you may need to allow a greater variance in as much as the latitude and longitude lines are spaced farther apart. Allow two points for each correct answer.

Correct answers are:

1. 33 degrees N17 degrees W
2. 9 degrees N-80 degrees W
3. 50 degrees N-5 degrees W
4. 37 degrees N25 degrees W
5. 18 degrees N-77 degrees W
6. Cartagena
7. Cape Verde Islands
8. Havana
9. east or northeast
10. 90 degrees

DAILY DIRECTIONS

Day 6

Objectives

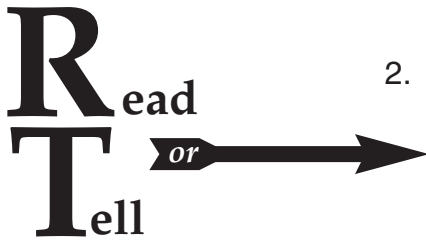
1. Students will have the graded NAVIGATION LESSONS returned.
2. FATE BULLETINS will be read.
3. Ship movement will take place.
4. Students will read and discuss the MINI LESSONS.
5. Students will write LOG ENTRY 2.

Materials

1. Corrected NAVIGATION LESSONS
2. MINI LESSONS and LOG ENTRY 2—*class set*

Procedure

1. Hand back the graded NAVIGATION LESSONS and allow the team captains time to compute the average score.
2. Read the following fate.



For all ships

For the past number of days the wind has been steadily decreasing. The ship has been sluggish in the water. Depending on what area of the ocean you are in, the wind has been dying at different rates. A die is going to be rolled four times. On a piece of paper each crew should predict each roll as to whether it will show odd or even. Each wrong prediction takes one dot away from your ship movement.

3. Allow each crew to move its ship on the wall map.
4. Students will read the MINI LESSONS on wind patterns. A discussion should follow to clarify any questions about the lesson.
5. Read and discuss the directions for LOG ENTRY 2 with students. Allow about 30 minutes for completing the entry. Collect the entries at the end of the day and evaluate them on the 1 to 20 scale.

Note: There will be no ship movement for the next few days so there is no great hurry to have the LOG ENTRIES ready for the next day.

DAILY DIRECTIONS

DAY 7

Objectives

1. Students will read and discuss the WRITING A RESEARCH REPORT handout.
2. Students will begin searching for an appropriate topic for their research reports.

Materials

1. WRITING A RESEARCH REPORT—*class set*
2. Encyclopedias and as many other materials related to the subject matter as you can find—*two sets or more*
3. Note cards (3" x 5" with lines)—*10 to 15 for each student*

Procedure

1. Have students read the WRITING A RESEARCH REPORT handout. In a related class discussion you should emphasize:
 - a. Writing in your own words
 - b. Note-taking
 - c. Choosing a focus question
2. Have students read the sample research report. Emphasize that the sample uses only one source but they should use at least two. Answer any questions about the paper.
3. Assist everyone in choosing a research topic. Some students may opt to choose a topic not on the list. You likely will have topics of your own to suggest.
4. Help individuals find appropriate materials to research. Insure that they write note cards, etc.

DAYS 8 AND 9

Objectives

1. Students will continue working on their individual research reports.
2. Students will study BIOGRAPHICAL SKETCHES of early Spanish explorers.

Materials

1. Books, encyclopedias, and other related materials needed for researching
2. BIOGRAPHICAL SKETCHES—*class set*

DAILY DIRECTIONS

Procedure

1. Distribute the BIOGRAPHICAL SKETCHES handout. You may again choose at your own discretion to read these with the class. Students should use these and the other lessons already received to study for Phase II of the simulation. Explain that knowing all information met in Phase I will help them pass the Phase II quizzes.
2. Continue to help individuals in their researching, writing note cards, etc.

DAY 10

Objectives


1. Students will write LOG ENTRY 3.
2. Students will have the corrected LOG ENTRY 2 returned.
3. FATE BULLETINS will be read.
4. Students will write an addition to the LOG ENTRY 3 based on fate movement and new feelings.

Materials

1. LOG ENTRY 3—*class set*

Procedure


1. Begin the day with the directions for LOG ENTRY 3. Give no indications of anything other than a becalmed state. Allow ample time for students to finish the entry. Do not collect the entries.
2. After students have completed the entry, read the following FATE BULLETIN.

Read
Tell 

For all ships

Your ship has been drifting helplessly now for weeks. Some of the crew have died. Others have given up hope. For the past few days the captain has ordered all crew members to attend daily prayer sessions. As you are kneeling at one of these sessions, a miracle seems to take place. One of the sails suddenly flaps a bit. All heads jerk up hopefully. Ever so slowly the sail begins to billow out to catch a small breeze. A cheer rings out from the entire crew. The ship nudges forward. As the minutes tick by, the breeze picks up increasing strength. The deadly calm seems to be broken.

DAILY DIRECTIONS

R_{ead}
T_{ell} 

3. Hand back the evaluated LOG ENTRIES 2. Allow the captains to compute the moves. Do not make any ship movement.
4. Read these additional FATE BULLETINS.


For Spanish ships

Your crew's strength depends to a great extent on how recently you resupplied your ship. Your ship's movement to some degree depends on your crew's strength. Men can become too weak to climb the rigging and trim the sails. If you have passed a landfall in the last 10 dots, add five dots to this move. If it has been more than 10 dots but less than 15, add two dots to this move.

For the privateer

Having had a longer route to get to a resupply area in the New World, your ship was fairly well provisioned when it hit the calm. Food and water are now getting critical, however. Your hope for survival lies in reaching the New World as quickly as possible. To achieve this you put on all the extra sail you have available. Roll one die. The number rolled will be added to your ship movement.

5. Allow students to make ship movements on the wall map.
6. Have students take out their LOG ENTRIES 3 they have been working on earlier. Tell them that now they are going to respond to the new conditions. Read the following as a guideline.

R_{ead}
T_{ell} 

For all ships

The change in the weather seems to have snatched you from the jaws of death. This break in the weather significantly changes your feelings. Finish your entry by telling how you feel about the break in the weather. Be creative. Be dramatic. Try to place yourself in the position of a real sailor in the same position.

7. Collect the LOG ENTRIES at the end of the day and grade them on the 1 to 20 scale.

DAILY DIRECTIONS

DAY 11

Objectives

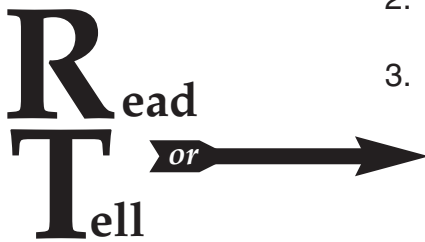
1. Students will have the evaluated LOG ENTRIES 3 returned.
2. FATE BULLETINS will be read.
3. Students will create a map.

Materials

1. EMERGENCY MAP-MAKING ASSIGNMENT—*class set*
2. Atlases books with maps of the Caribbean and wall maps of the area—*as many as you can have*
3. Manila drawing paper

Procedure

1. Hand back the corrected LOG ENTRIES 3.
2. Allow the captains to compute the moves.
3. Read the following FATE BULLETINS:

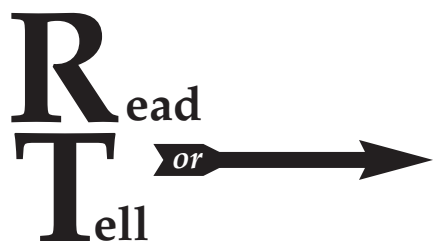


For the privateer traveling along the eastern coast of America

Strong winds are blowing in your favor. Choose a member of the crew to call the flip of a coin. As long as the crew member calls the coin flip correctly, your teacher will keep flipping the coin. Once the crew member misses, that is all. Move one extra dot for each correct call.

For any ship on Route 1

This route cuts across the Sargasso Sea. This area is noted for heavy surface weeds. These weeds slow your progress. Choose a member of the crew to call the flip of a coin. As long as he/she calls the coin flip incorrectly, the teacher will continue flipping the coin. Once the crew member calls the coin flip correctly, that is all. Subtract one dot from your move for each incorrect call.



DAILY DIRECTIONS

For any ship on Route 2 or 3

Gusty winds from a tropical storm have filled your sails for three days. You are moving rapidly toward your destination. Have one crew member call the coin flip until he/she misses. Add one dot to your move for each correct call.

4. Allow each crew to make the appropriate moves on the wall map.
5. Distribute the EMERGENCY MAP-MAKING ASSIGNMENT sheets. You should also provide some type of drawing paper for making the maps. Paper with a brownish hue makes an excellent map. It tends to look as if it were done on parchment.

DAY 12

Objectives

1. Students will complete their maps.
2. Students will use any extra time finishing up their research reports or studying Phase I materials so that they'll be ready for the Phase II quizzes.
3. Evaluate the maps as outlined on the EMERGENCY MAP-MAKING ASSIGNMENT sheet.

DAY 13

Objectives

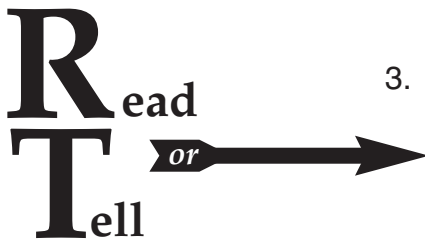
1. Students will have their evaluated maps returned.
2. FATE BULLETINS will be read.
3. Students will write LOG ENTRY 4.

Materials

1. LOG ENTRY 4—*class set*

Procedure

1. Return the graded maps from the EMERGENCY MAP-MAKING ASSIGNMENT. You may wish to display these maps about the room if they are particularly well done.
2. Allow the captains time to compute the moves.



3. Read the following FATE BULLETINS:

For all ships

A tremendous tropical storm is building up. It threatens to turn into a hurricane. The winds are in a turmoil. They keep changing directions in some areas. If your ship is east of the 60 degrees W longitude line, you have not yet been affected by the storm. If you are between 60 degrees W and 70 degrees W longitude, the changing wind patterns are beginning to affect you. Flip a coin three times. Add one dot to your move for every head. Subtract one dot for every tail. If you are west of the 70 degrees W longitude line, you are in the teeth of the storm. You must turn tail and run from the storm to keep from being shipwrecked. Flip a coin three times. Subtract one dot from your move for every tail. If you have already reached your destination this fate is not yours.

4. Allow each crew to move its ship on the wall map.
5. Read and discuss the directions for LOG ENTRY 4. This entry should get the various crews to their destinations. If this is not the case, the RESEARCH REPORT that is due on Day 14 should accomplish the task. If you see that this is still improbable, move the due date of the RESEARCH REPORT back a day or two and introduce some special challenge projects to those teams that still need help. Here are some suggestions for projects for slower crews:
 - a. Have the crew learn some seafaring songs and present them to the class.
 - b. Have the crew study sailing techniques and report to the class.
 - c. Have the crew build a diorama showing some aspect of a mariner's life, the conquest of the native Americans, or an explorer claiming some land for his country.
 - d. Have the crew construct a ship model and tell the class about it.
 - e. Have the crew do a skit about something they have studied.
6. Collect the LOG ENTRIES at the end of the day and evaluate on a 1 to 20 scale.

DAILY DIRECTIONS

DAY 14

Objectives

1. Students will receive their evaluated LOG ENTRIES 4.
2. Students will turn in their RESEARCH REPORTS.
3. Students will read and discuss PHASE II RULES.
4. Students will receive PHASE II MOVE RECORD sheets.
5. Students will prepare themselves for the quiz moves.

Materials

1. Evaluated LOG ENTRIES 4
2. PHASE II RULES—*class set*
3. PHASE II MOVE RECORD sheets—*one set for each team*

Procedure

1. Pick up students completed RESEARCH REPORTS. Evaluate these prior to the final day.
2. Hand back the evaluated LOG ENTRIES 4. Allow the captains ample time to compute the moves.
3. Allow the teams that still need to move to get to their ports to do so. If some teams are already at their destination, make a note of how many left-over moves they have on their MOVE RECORDS.
4. Distribute the PHASE II RULES. Read and discuss these with the class so they have a thorough idea of how Phase II works. You may wish to do one or more of the following:
 - a. Review the navigation lessons and practice some moves.
 - b. Have a practice broadsiding contest between two crews (using spelling words or math problems).
5. Distribute the PHASE II MOVE RECORD sheets. Have each captain record his/her team's names on the sheet.
6. Have the teams prepare for the upcoming quizzes by reviewing the BACKGROUND HISTORY, the BIOGRAPHICAL SKETCHES, and other Phase I materials.

DAILY DIRECTIONS

DAY 15

(and sequential days ...)

Objectives

1. Students will take a MOVE QUIZ consisting of five questions.
2. FATE BULLETINS will be read.
3. Appropriate ship movement will take place.

Materials

1. MOVE QUIZZES—*class set*
2. Shoebox with numbered slips for fates

Procedure

1. Begin Phase II by placing the galleons in the New World port they were assigned by the king. (The privateer starts from the pirates flag.)

The coordinates of these locations are the following:

Cartagena: 11 degrees N by 76 degrees W

Portobelo: 10 degrees N by 80 degrees W

Veracruz: 19 degrees N by 96 degrees E

Pirate's Flag (privateer): 27 degrees N by 86 degrees W

2. Begin the day by giving one of the MOVE QUIZZES.
3. Correct the quizzes immediately using the following MOVE QUIZ Key:
 - Each ship will move on the basis of an average of its team members scores.
 - If you want to speed up or slow down the simulation, merely increase/decrease the number of degrees movement awarded for correct answers.
4. After all scores are recorded on the PHASE II MOVE RECORD sheets, have a crew member from each team pick one of the numbered slips of paper from the FATE CARD shoebox. Read the appropriate fate as it is recorded in this Teacher Guide.
5. Each crew will make the appropriate adjustments on the PHASE II MOVE RECORD sheet and make out a proposed move on a slip of paper. *Move no ship until all proposed moves have been collected.*
6. Closely supervise the movement of the ships on the class map.

DAILY DIRECTIONS

7. Whenever a contact situation arises, use questions from the CONTACT QUESTIONS for battle questions. You may also choose to use some of your own questions based on any subject you have touched on in class. The crew having the highest total for five questions wins. In case of ties, have the captains battle one another in answering “tie-breakers.” (See Rule 9a in the PHASE II RULES handout.)
8. Remind students that they should review the PHASE II RULES and that you will settle all disputes based on them.
9. You may wish to put this quick guide for each turn’s play on the chalkboard:
 - a. Give the MOVE QUIZ. Have crews separate themselves into their circles.
 - b. Have captains collect and exchange quizzes.
 - c. Orally grade the quizzes.
 - d. Have captains return the quizzes and then figure their own crew averages on their PHASE II MOVE RECORD sheets. Galleon captains receive this average. but the privateer captain receives twice his/her crew average. (You may change this averaging to speed up play if you wish by giving galleon captains twice their average; the privateer, four times.)
 - e. Have captains pull FATE CARD numbers. Read the appropriate fate and have the captain record its affects on the MOVE RECORD sheet.
 - f. Move ships into new positions. If “contact” is made allow captains the options in Rule 9 In the PHASE II RULES.

MOVE QUIZ Key

- Quiz 1:** 2, 4, 5, 3, 1.
Quiz 2: c, b, d, c, d.
Quiz 3: F, T, T, T, F.
Quiz 4: Sea of Darkness, 1492, nineteen, gold, storms.
Quiz 5: 4, 2, 5, 1, 3.
Quiz 6: c, c, b, a, d.
Quiz 7: T, F, T, F, T.
Quiz 8: Pinta, Panama City, malaria, Father of Waters, camel.
Quiz 9: 4, 3, 5, 1, 2.
Quiz 10: a, b, b, a, d.

DAILY DIRECTIONS

10. The simulation ends whenever the first galleon enters La Coruna or Cadiz, or when the privateer has sunk all the galleons. You should decide beforehand what prizes you are going to award for first, second, and third place. If your class and your philosophy are grade oriented, you may give:

- As for first place;
- Bs for second;
- Cs for third, and
- Ds being given all others.

However, candy bars or fruit (or more privileges of some type) can be substituted. With some classes just being publicly recognized is enough reward. In the latter case we recommend that you make medals of some type and conduct a “royal” ceremony when awarding them. As a final option you can ask your students what prizes they would think appropriate before starting Phase II.

FINAL DAY

Objectives

1. Students will evaluate GALLEON by sharing their experiences and discussing their reactions to what happened.

Materials

1. Student Guides
2. All written work (handouts, RESEARCH REPORTS, etc.)

Procedure

1. Hand back and comment upon students' RESEARCH REPORTS.
2. Read portions of several students' reports that are clearly excellent.

DAILY DIRECTIONS

3. Have crew members sit together and discuss debriefing questions such as the following:
 - a. Did you gain any appreciation for 16th century seafaring?
 - b. What knowledge do you wish you had had to make your LOG ENTRIES more realistic?
 - c. How effectively did your crew make decisions? Which were your good decisions? your bad ones?
 - d. Did individual or group decisions tend to be wiser?
 - e. Why did the winning team win: Was it because of luck? skill? or what?
 - f. What was the most interesting thing you learned about this historical period?
 - g. Did you grow in any skills (for example, reading, writing, note-taking)?
 - h. How does a simulation such as GALLEON compare with other ways of learning (texts, films, lectures, etc.)?
 - i. What were GALLEON's strengths? weaknesses?
 - j. Should next year's students play this simulation? If No, why not? If YES, why? Also, if YES, what would improve it?

BACKGROUND HISTORY

THE NEW WORLD

The Dark Ages From about 476 A.D. to about 1000 A.D., there was little change in the daily lives, since people in Europe lived much as their ancestors before them had lived. In this period of time, later to be called the Dark Ages, people had few comforts of life. Their food was plain and often spoiled. Their clothes were coarse and uncomfortable. The cloth they used was made from flax or wool. Their houses and furniture were crudely put together. Very few people at this time could read or write. In these years, there was a strong emphasis on religious learning. The people learned about the Bible and the holy places in it. Also during this time, the Christian Byzantine Empire lost territory to various Muslim armies, which conquered much of North Africa, Egypt, Palestine, Syria, and Spain.

The Crusades During the 11th century, Europeans were making pilgrimages to Palestine or the Holy Land, as it was then called. To ease the passage of pilgrims, to help friends, and to give unified purpose to the political infighting among the knights and kings—among many other political, economic, religious, and military reasons—Pope Urban II called on people from across Europe to capture the Holy Land from the Muslim Turks. Kings, nobles, and others formed armies and began a series of wars known as the Crusades. The Crusades lasted for over 200 years.

When the Christian Crusaders went to war in Palestine, they visited many beautiful cities. In the market places of Constantinople and Palestine, they discovered beautiful garments made from soft woven cottons and shining silks. They saw pearls, diamonds, rubies, and other precious stones that were not available in Europe. They experienced fine foods that were made tasty with spices from the East Indies. They tasted tea from China and wine from Arabia. They viewed rugs and carpets from Persia and ivory from Africa. As the Crusaders returned home from the wars, they brought

back some of these fine goods with them. The people of Europe began to treasure the wonders that were available from the East.

Marco Polo In 1271, two brothers left Italy for a long voyage to the East. They were jewel merchants. They wanted to establish trade with the legendary land of Cathay. With them they took the son of one of the brothers; his name was Marco Polo. They spent 24 years serving in the court of Kublai Khan, ruler of the land. When Marco finally returned to Europe in 1295, he brought with him tales of the riches of the Far East. He wrote a book which spoke of the Great Wall of China. It told of the splendid palaces roofed with gold. This book encouraged merchants to begin trading with the East.

The coastal cities of Italy became busy seaports for the goods that moved across the Mediterranean Sea. From the Mediterranean the goods had to move across the deserts of the Middle East by camel caravan. In time, they made it to India and China. All the routes were partly by sea and partly by land. When the Turks captured more of the land, they blocked off all the trade routes available to the Europeans. The merchants were forced to begin searching for new routes to the Far East.

Henry the Navigator Prince Henry was the son of the king of Portugal. He had an observatory built on the seacoast in southern Portugal. He invited geographers, mapmakers, and seamen from all parts of Europe to come and study at his observatory. He set up a school for navigators. He sent sailing expeditions farther and farther south along the coast of Africa. Each time a ship would return from such a voyage, the geographers and mapmakers would improve the maps.

The sailors were aided by new and better navigation devices. The compass had been perfected. This allowed sailors to sail out of sight of land. Prior to this time, sailors dared not stray

BACKGROUND HISTORY

from the coastlines. They could tell which direction they were going only by viewing the sun or the stars. If they were caught in fog or a storm at night, they were helpless. With a new instrument called an astrolabe, they could tell how far from the equator they were. New ships were built with improved steering gear. And when these better ships had sailors using the new instruments and improved maps, it became much safer to sail out of sight of land. Nevertheless, when Prince Henry died in 1460, he had never achieved his dream of discovering an all water route to the fabled East.

Three Early Explorers In 1487, a Portuguese explorer named Bartholomeu Dias set a new record. On orders from the new King John II, he sailed farther south than anyone before him had gone. Each explorer that sailed south along the African coast had been instructed to build a pillar of stones at the farthest point reached. Dias passed the last pillar and kept heading south. His ship was buffeted by stormy seas, but still he kept on. After days of fighting the storms, he reached the southern tip of Africa. He named it the Cape of Storms. King John, feeling that the name might discourage further exploration in the area, renamed it the Cape of Good Hope.

On Aug. 3, 1492, three ships left the harbor of Palos, Spain. A voyage was beginning that the commander of the ships had worked toward for many years. His plan was to reach the East by sailing west. He had tried to get support for his plan from the kings of Italy, England, and Portugal. Finally, King Ferdinand and Queen Isabella of Spain agreed to support his dream. The man was Christopher Columbus. The plan seemed ill-fated. The seacoast town of Palos was forced to supply two ships and crew to Columbus for the voyage. The Palos residents received this punishment for having been caught smuggling illegal goods into Spain. Columbus confiscated a large ship named the Santa Maria and a smaller caravel named the Pinta. Another caravel, the Nina, was purchased outright from a Palos merchant.

Some 88 seamen were forced to crew the three ships across the Sea of Darkness. The rudder of the Pinta broke a few days out to sea. The tiny caravel sailed crippled into the Canary Islands, where it was repaired. While there, Columbus spent an additional two weeks rerigging the Nina from lateen (triangular sails) to square rigging. Hearing that a Portuguese man-of-war was on its way to stop his voyage, Columbus slipped out to sea with his three ships. As he passed the last island in the group, it exploded with a violent volcanic eruption. It seemed to be an additional omen of doom.

When the ship's compass failed to work properly, his men demanded that he turn back. Columbus, forcing his will on the men, continued on. When they sailed into what seemed to be a sea of surface weeds, the men became very moody. The ships were slowed greatly by the weeds. The area today is known as the Sargasso Sea. Columbus had to lie about the distance they had traveled to keep his men from forcing him to return to Spain. Finally signs of land appeared. Land birds swooped overhead and bits of brush and pieces of fruit were seen floating in the water. Columbus was very relieved when land was finally sighted on Oct. 12, 1492. Since leaving Spain, 70 days had elapsed. Columbus named the first island sighted San Salvador. Columbus was to make four voyages in all to the New World. Unfortunately, he died in poverty in 1506, still thinking he had reached the islands off the continent of Asia and unaware that he would live in history as the person who launched European exploration of America. (The honor of discovering the route to the Far East was to go to another Portuguese explorer. In 1498 Vasco da Gama sailed four ships around the Cape of Good Hope northward into the Indian Ocean to reach India and the Spice Islands.) Other captains followed Columbus' lead to the New World of the Americas with its abundant riches, particularly gold. The age of the great galleons had begun.

LOG ENTRY 1

LEAVING HOME

Your name: _____ Your Ship's name: _____

Directions: Begin this LOG ENTRY on the bottom of this sheet. If you wish to write a long entry, use the back of this sheet and another sheet . Write legibly and accurately. Be creative!

Situation: This is your first day at sea. You have left port just this morning. New to the crew and the ship, you do not know anybody very well. Ahead of you lies a dangerous voyage. You will not return to your home for almost a year. You have heard all of the stories about the Sea of Darkness and its dangers. You have also heard of the dangers that await in the New World.

Entry: Begin your entry by telling about your feelings of leaving your home, family, and friends. Describe the ship and its crew. Tell about one particular character aboard the ship that impresses you in some way. Explain why you signed up to come on this voyage and what you do in the New World. Describe the route you expect to take. Tell about any fears you may have about the voyage. Be descriptive. The better the entry, the more movement your ship will get.

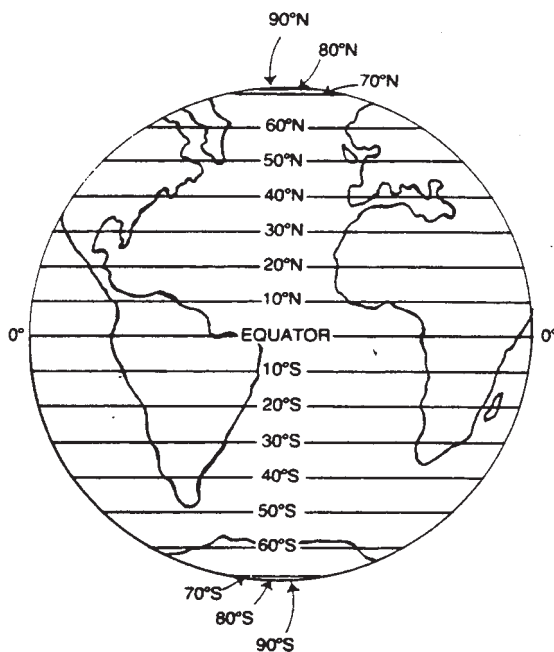
This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

NAVIGATION LESSON 1

Navigation is the art of steering a vessel over a distance from one place to another. At least one member of a crew must know how to navigate. This skill will be an important part of Phase II while the galleons will be trying to return to Spain and the privateers will be trying to stop their return.

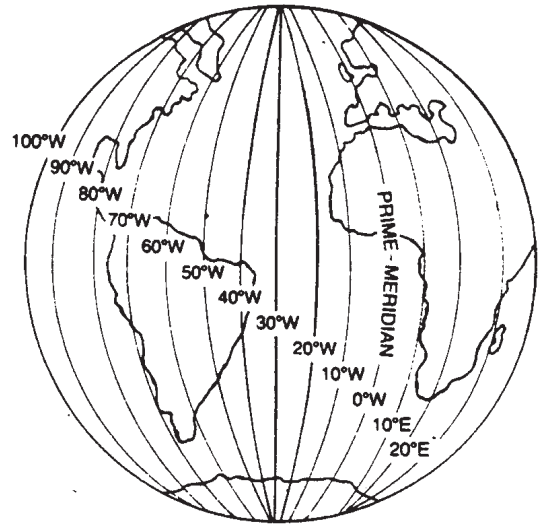
Lines of Reference are used by navigators to tell where they are and where they are going. These imaginary lines run up, down, and across a map.

The lines that run across a map of our earth are known as **Latitudes**. They measure distances in degrees north and south of the equator. Each line has its own number.



As you can see, the numbers begin with zero at the center of the world and get bigger as they move in each direction. The highest numbered Latitude lines are 90 degrees, the north and south poles.

The lines that run up and down on a map are known as **Longitudes**. They measure distance in degrees east and west of a line known as the **Prime Meridian**. The Prime Meridian goes through Greenwich, England. Each longitude line also has its own number.



One Thing to Remember: Not all the imaginary lines are placed on maps. Too many lines would overly crowd the map space. So since a map usually shows only every 10th line, you have to figure out where the lines numbered 1-9, 11-19, 21-29 really are. (Some maps show only every 15th or 20th line.)

Suppose we numbered our city streets with numbers and directions like we number maps with latitudes and longitudes. It might look something like this.

	G				30 No. St.
			CH		20 No. St.
		CP			10 No. St.
				BP	Equator St.
		C			10 So. St.
B					
40 W. Ave.	30 W. Ave.	20 W. Ave.	10 W. Ave.	Prime Meridian Ave.	20 So. St.

G = Gas Station
H = Home
B = Bakery
CP = City Park

C = Church
CH = City Hall
BP = Ball Park
● = Car Accident

NAVIGATION LESSON 2

Let's take a trip through our make believe town. If we started our trip at City Hall, we would be at the corner of 20 North St. and 10 West Ave. If we abbreviate our position, we can say we are at 20N-10W.

Suppose we wanted to go to the gas station to fill our vehicle with fuel for the trip. The shortest route is to travel west on 20 North St. and then turn north onto 30 West Ave. The gas station is north of 20 North St. but not quite to 30 North St. If there were a street running across the city at that location, we could say the gas station was at 25 North on 30 West.

Next stop is the Bake Shop. Its abbreviated street name is 10S. Its location is between 30W and 40W. We could say its location is 10S-36W. When we put both locations together, it tells us more precisely where something is. Both locations put together in this way are called **Grid Coordinates**.

See if you can find your way around our make believe town. On a slip of paper, write down the grid coordinates of the places you go to. You can check yourself later by looking at the answers printed upside-down at the bottom of the page.

1. Go to the ball park and stand on second base. What are the grid coordinates of your position?
2. There has been a car accident on the corner indicated. When you go to see it, what will be your grid coordinates?
3. It's time to go home. What will your position be when you get there?

Check your answers at the bottom of the page. If you have them right, you're on your way to becoming a navigator.

Now it is time to test your skills using grid coordinates. You may use the map in your Student Guide or any other maps you have available. Latitude and Longitude lines are always in the same place on any map. Use a clean sheet of paper to record your answers. You will turn in your paper to your teacher when you have completed the following tasks. This paper will be graded and will help move your ship across the Atlantic Ocean. Therefore, be careful.

1. Name the grid coordinates of Madeira Island.
2. Name the grid coordinates of Portobelo.
3. Name the grid coordinates of the southern most part of England.
4. Name the grid coordinates of the eastern most Azore Island.
5. Name the grid coordinates of Jamaica.
6. Name the treasure city nearest to 10 degrees N-75 degrees W.
7. Name the island group clustered about 17 degrees N-23 degrees W.
8. What present-day capital is found at 23 degrees N-82 degrees W?
9. What direction would you generally expect the wind to be blowing at 45 degrees N-45 degrees W?
10. How many degrees of longitude will a galleon travel going from Cadiz to Veracruz?

Answers:
Second base 5S-5E
Car accident 10N-10E
Home 15N-40W

Wind Patterns proved to be extremely important to the early ocean voyagers. Since the ships were powered only by wind, navigators had to know where to find the most favorable winds. They soon discovered that the winds tended to remain stable in certain latitudes. The region between 5 degrees north and 5 degrees south of the equator became known as the **doldrums**. This is an area of little wind. A ship could become becalmed for weeks at a time. It was an area to be avoided in mid-ocean.

Horse Latitudes Between 30 degrees and 40 degrees is an area that is known for its fair, dry, clear, windless weather. This area has long been known as the **horse latitudes**. But how did it get this strange name? The name was given to the area by early Spanish sailors. When the first Spanish explorers went to the New World, many went to conquer lands. The Spanish explorers were soldiers. They brought their horses to the New World with them. Their horses aided them in conquering the Indians who had no horses. Many of the first ships attempted to make the shortest passage possible to save time. Rather than taking the more favorable trade winds to the south, they sailed directly west into the 30 degree latitudes. The ships found themselves at the mercy of the windless seas. Many ships lowered their lifeboats and attempted to tow the big ships out of the area of calm. It was nearly impossible to tow a galleon with rowboats. In an effort to make the job easier, they tried to lighten the ship so it would ride higher in the water. This was accomplished by killing the horses and throwing them overboard. This became a common practice when the big ships became becalmed for a long period.

Trade Winds North and south of the doldrums are the trade wind belts. They lie between 5 degrees and 30 degrees latitudes. Trade winds in the northern hemisphere are termed **northeast trades**. This means they blow out of the northeast in a southwesterly direction. In these latitudes, navigators were assured of finding the most favorable winds for getting to the New World.

Ghost Ships There were stories of ghost ships that drifted aimlessly in the areas of the horse latitudes. Their crews were sometimes found on the ships, dead from starvation and thirst. Sometimes the ships had no one aboard. The crews had simply abandoned them, choosing to take their chances in rowboats. Most often, this choice ended in disaster.

Westerlies North of the horse latitudes are the **westerly wind zones**. These winds come from the west and blow strongly to the east. They are found in the higher latitudes. In the southern hemisphere the winds blow so strongly at these latitudes that mariners have nicknamed them the “roaring forties, the furious fifties and the screaming sixties.” These wind patterns provided the ships with steady winds to get back to Europe.

LOG ENTRY 2

BECALMED

Your name: _____ Your Ship's name: _____

Directions: Begin this LOG ENTRY on the bottom of this sheet. If you wish to write a long entry, use the back of this sheet and another sheet . Write legibly and accurately. Be creative!

Situation: The wind has now totally disappeared. The sails have hung slack on the yard arms for a number of days. The heat is unbearable above and below decks. Food is beginning to spoil, and water supplies are running dangerously low. The inactivity is causing the crew to quarrel among themselves. Several fights have broken out.

Entry: Begin your entry by telling about past events since leaving home. Include things that have happened as reported in the FATE BULLETINS. Tell more about the crew members, now that you have gotten to know them better. Tell about your present problem. What are your feelings? Add any Incidents that have happened on your ship. Let your imagination be your guide. Write the best entry you can.

WRITING A RESEARCH REPORT 1

As long as you are in school, you will need to do research. One key to success in school is ability to take brief notes and then write a short, organized research report. If you learn how to do simple research, you will have an easier, more satisfying time while you are in school. Even after you leave school, you will find the skills developed while writing research reports useful in organizing and presenting facts and ideas to other people.

Put It In Your Own Words As in any type of work or study, the key to writing a good research report is being organized. First of all, you must take clear, simple notes while you are studying your research materials. If you learn to take notes in your own words and under clear headings, you will not find it difficult later to write your report. ***And you will have the satisfaction of knowing that you wrote the report—you did not copy it out of an encyclopedia.*** Anyone can copy, but copying is not what is expected of you when you are assigned to write a research report. You are expected to take notes in your own words from several sources such as books, newspapers, magazines, and encyclopedias.

Who, What, Where, When, Why As you read your research materials, remember the five Ws—Who, What, Where, When, Why. Almost all important information falls into one of these areas.

- Who is involved?
- What important things are going on?
- Where are the people and the events taking place?
- When are these events happenings?
- Why did these events happen, and Why are they important?

If you include this information in your notes, you will be able to build much of your notes into your actual paper.

Note-Taking As you read and think about the five Ws, the best way to organize your thinking so that you can later organize a clear paper is to do your note-taking in a systematic way. There are several ways to take notes. The note card example below represents only one acceptable method. Study it carefully and ask your teacher any questions you have about what is there and why it is there. Do this before you begin making your own note cards.

First Commission

Morgan was commissioned in 1668 by Governor Thomas Modyford of Jamaica to raid Spanish shipping and gather information about a Spanish invasion.

World Book Encyclopedia,
Vol. 13, p. 659

Notice the following things about the note card example above:

1. You place a heading at the top so that you remember to limit your notes on the card to one topic about your paper's subject.
2. You take notes only about the heading (in this case— Henry Morgan's commission).
3. You do not take notes in the exact words that appear in the encyclopedia. You take notes in your own words.
4. At the bottom of the card you place the name of the source and the page where you found the information.

Taking Notes From an Encyclopedia When you do research, you are looking for answers to a question you want to answer. Let us imagine, for example, that you have asked this question: ***Was Henry Morgan a loyal privateer for England or a pirate for himself?*** Study both columns on the next page. See how the student took notes in his own words (note cards in right column) while he/she was reading someone else's words (the encyclopedia in the left column).

WRITING A RESEARCH REPORT 2

Encyclopedia Article

Sir Henry Morgan (1635?-1688)

Morgan, Sir Henry (1635?-1688), the most famous English pirate, fought the Spanish fleet on the seas and robbed Spanish towns in the West Indies. He served for a time as lieutenant governor of Jamaica and commander in chief of the English forces there.

Morgan's bold raids began in 1668. Thomas Modyford, the governor of Jamaica, issued Morgan a privateer's commission to cruise against the Spanish and collect information about a rumored attack on Jamaica.

His Attacks Morgan attacked and captured the inland town of Puerto Principe (now Camaguey), Cuba. He then sailed to Portobelo, Panama, a town so well fortified that the French under his command deserted rather than risk the attack. Morgan took the city after a severe battle. He forced nuns and priests to place ladders against the city walls for his attacking force. Morgan's men looted the city. Governor Modyford disapproved of these attacks on Puerto Principe and Portobelo, because Morgan's orders were to attack ships, not towns. Morgan, however, celebrated his victories with a drinking party aboard his ship. The ship suddenly exploded, killing more than 300 men. But Morgan survived the explosion.

He looted Maracaibo, Venezuela, in 1669, and also captured three Spanish ships that had been sent specifically to take him. Morgan took a heavy ransom from Maracaibo and returned to Jamaica. Governor Modyford once again rebuked Morgan for the exploits, but made him commander of all the ships of war in Jamaica.

Attack of Panama Morgan then commanded 1,400 men. In January 1671, he attacked Panama City, Panama, and captured it in a remarkable battle. The Spaniards turned a herd of wild bulls against Morgan, but the bulls stampeded and helped rout the Spaniards. Morgan burned Panama City and took much of the city's treasures. Morgan shared some of the spoils with his men, but then abandoned them and sailed away with the bulk of the loot.

His attacks on Panama violated a peace treaty signed by Spain and England in 1670. England had agreed to end acts of piracy on Spanish towns in the West Indies if Spain would recognize England's rule over English West Indian colonies. Morgan was arrested for attacking Panama and was sent to England for trial. King Charles II forgave him for his attack and knighted him in 1674. Morgan then returned to Jamaica as lieutenant governor and commander-in-chief of the English forces there. He was dismissed in 1683, but he continued to serve on the Jamaican council. He died in his bed in 1688.

Morgan was born in Wales and went to Jamaica as a boy.

Note Cards

First Commission

Morgan was commissioned in 1668 by Governor Thomas Modyford of Jamaica to raid Spanish shipping and gather information about a Spanish invasion.

World Book Encyclopedia, Vol. 13, p. 659

Disobeyed Orders

Morgan attacked the towns of Puerto Principe and Portobelo instead of ships. This angered the governor but Morgan didn't seem to care.

World Book Encyclopedia, Vol. 13, p. 660

Disobeyed Orders A Second Time

In 1669, Morgan attacked another town. This time Maracaibo, Venezuela. The governor was again angry but promoted Morgan.

World Book Encyclopedia, Vol. 13, p. 660

Violated Peace Treaty

In 1671, Morgan captured Panama City. Violated a peace treaty England had made with Spain in 1670 to end piracy.

World Book Encyclopedia, Vol. 13, p. 660

Abandoned His Men

Morgan shared some of the loot from Panama with his men but left them in Panama. He sailed away with most of the treasure.

World Book Encyclopedia, Vol. 13, p. 660

Arrested

Morgan was arrested and sent England for his raid on Panama.

World Book Encyclopedia, Vol. 13, p. 660

Knighted

Morgan was knighted in 1674 by King Charles II. He returned to Jamaica as lieutenant governor and commander in-chief of the English forces there.

World Book Encyclopedia, Vol. 13, p. 660

WRITING A RESEARCH REPORT 3

Sample From Short Research Paper

(Based on note cards from page 32)

One of the boldest men to sail the Caribbean was Henry Morgan. He waged a private war on Spain. There is some question if he did it out of loyalty to England or for personal profit.

Morgan got his start in 1668 when Governor Thomas Modyford of Jamaica issued him a privateer's commission. This authorized him to raid Spanish ships. He was ordered to find out all he could about a possible Spanish invasion on Jamaica.

Morgan did not go out and attack ships. Instead, he attacked two Spanish towns. The first, Puerto Principe, was in Cuba. The second was the Spanish treasure city of Portobelo. The attacks angered the Jamaican governor, but this did not seem to bother Morgan. A year later, he again disobeyed orders. This time he attacked the Spanish town of Maracaibo, Venezuela. Governor Modyford was again upset with Morgan, but this did not stop him from giving Morgan more men and ships.

Despite a peace treaty England made with Spain in 1670 to end piracy, Morgan attacked the Spanish town of Panama City. After he had captured the city, he shared a little of the loot with his men. He then sailed off in his ship, leaving most of his men behind to face the music when Spanish reinforcements arrived. Morgan took most of the treasure taken from the city with him.

Morgan was arrested for his attack on Panama City and sent to England. Rather than imprisonment, King Charles II knighted him. Morgan returned to Jamaica as lieutenant governor and commander-in-chief of English forces.

Bibliography *

——— "Morgan, Sir Henry," *World Book Encyclopedia*, Vol. 13, pp. 659-660.

* A bibliography tells your reader where you did your research.

WRITING A RESEARCH REPORT 4

Directions: Follow these steps while writing your research report.

1. **Choose a topic that interests you** and that you feel is an important part of Caribbean or related history. You may wish to choose one of the 30 topics listed below or you may want to create your own topic.
2. **Find at least two sources** for your research. One should probably be an encyclopedia article that gives you an overview in a few hundred words.
3. **Read the encyclopedia overview** on your topic to see if the topic still interests you. If it does, go on to Step 4. If it no longer interests you, go back to Step 1 and start over.
4. **Narrow down your topic by creating a Focus Question** that you wish to answer. For example, if you choose Aztec Indians, you might ask: "What things helped the Aztecs to be conquered so easily?"
5. **Clear your Focus Question** with your teacher.
6. **Take notes on note cards.** Remember that each note card should contain a heading, one important fact or event, and the source where you found the information.
7. Once you have enough notes to write a paper of 300 or more words, **clear your note cards** with your teacher.
8. **Write your paper.** An **introductory paragraph** should tell why you chose the topic and what your focus question is. The **body paragraph** should contain information that answers your **Focus Question**. An **ending paragraph** should once again mention the main idea of your paper and any conclusions you reached.
9. **Write a Bibliography under your final paragraph.** If you have two or more sources, they should be listed in alphabetical order based upon their authors' last names.

Special Note: No one may begin PHASE II of GALLEON until this project is completed.

30 Possible Topics

- | | |
|---------------------|--------------------------------|
| 1 Balboa | 16 Pizarro |
| 2 calypso music | 17 Line of Demarcation |
| 3 Columbus | 18 Cortez |
| 4 Prince Henry | 19 Marco Polo |
| 5 Magellan | 20 Caribbean pirates |
| 6 Montezuma | 21 Inca Indians |
| 7 Crusades | 22 Maya Indians |
| 8 Vasco da Gama | 23 Coronado |
| 9 sailing ships | 24 Henry Morgan |
| 10 malaria | 25 Sir Francis Drake |
| 11 Arawak Indians | 26 Queen Elizabeth I |
| 12 Aztec Indians | 27 John Hawkins (slave trader) |
| 13 Carib Indians | 28 Spanish Armada |
| 14 Phillip of Spain | 29 Amerigo Vespucci |
| 15 Ponce de Leon | 30 pirate strongholds |

BIOGRAPHICAL SKETCHES 1

Amerigo Vespucci was an Italian living in Spain at the time of Columbus' explorations. Amerigo made several trips to the New World. He did not feel as Columbus did, that the land discovered was Asia and its off-shore islands. He wrote vivid accounts of this continent, which he called the New World. In 1507, a copy of his accounts fell into the hands of a German mapmaker named Martin Waldseemuller. This German geographer was writing a book. Because Vespucci called the land a New World, Waldseemuller felt that it should be named after him. Thus the land Columbus discovered was not called Columbia, but America. America was the Latin way of writing Amerigo.

Ponce de Leon had sailed with Columbus. he later became the Spanish governor of Puerto Rico. Indian legends reached him about a magic spring that lay in the land to the northwest. In 1513, he provisioned three ships and sailed out in search of this magic "fountain of youth." On Easter morning he sighted the mainland and claimed it for Spain. He named the land Florida. In Spanish this means "flowery land." Ponce de Leon searched diligently, but he found no magic waters. On a second trip to Florida some years later, he was killed by an Indian's arrow. He was the first Spaniard to explore part of the North American continent.

Vasco Nunez de Balboa was a soldier of fortune who found his way to the New World. He lived in Hispaniola for a time until bad debts forced him to leave or be arrested. He got on a ship and went to Panama. There he founded a Spanish colony. He heard rumors of a great body of water that lay west of the mountains. He gathered a group of 190 Spaniards and Indians and struck out across the steep mountains and marshy jungles of Panama. Panama is only 50 miles across, but the going was difficult. Finally, they reached the western shore. Balboa claimed the sea and all the

lands touched by it in the name of Spain. The King of Spain was delighted. He commissioned Balboa with the rank and title "Admiral of the Pacific." Balboa began to build a small fleet of ships at Panama. In 1517, Balboa made an enemy of the governor of Panama, who tried him for treason and had him executed.

Ferdinand Magellan was a Portuguese who sailed for Spain. Like Columbus, he believed the world was round. He offered to sail around the world claiming all new lands he discovered for Spain. On Sept. 20, 1519, Magellan left Cadiz with five ships and 265 men. He sailed southwest toward South America. He searched for a way around the continent until winter forced him to put ashore. When spring came, Magellan pushed on. Finally his ships came to a narrow strait at the southern tip of South America. It now is called the Strait of Magellan. The land surrounding the strait was called Tierra del Fuego, "the land of fires." The land was so forbidding and desolate and the waterway so dangerous that some of the men mutinied. One ship refused to go on and returned to Spain. Magellan lost a second ship during the three weeks of maneuvering in the narrow rockbound passageway. When Magellan finally emerged into the Pacific, he had no way of knowing how incredibly large it was. As he pushed westward, food ran out. The men resorted to eating rats they trapped on the ship. They boiled leather and ate that too. Scurvy became a problem. Finally, they reached the Philippine Islands. Here, Magellan was killed in a fight with the natives. One ship had to be abandoned. The crews continued west in the remaining two ships. The fourth ship had to be left behind at the Spice Islands. Finally, in 1522, one lone ship loaded with a cargo of spices limped into Spain. Only 19 men completed the historic voyage. Magellan's voyage served to prove once and for all, the world was indeed round.

BIOGRAPHICAL SKETCHES 2

Hernando Cortez was living in Cuba when he heard tales of gold to be found in a land to the west. The tales told of a great Indian culture whose people lived in great stone cities. Their capital city was built on an island in a lake. The Indians were called Aztecs; their leader was named Montezuma. Legend says these Aztecs were once ruled by a white-skinned god with long dark hair and a beard. This god brought prosperity to the land. He taught the Aztecs great building and farming skills. This fair-skinned god left the Aztecs to go to the Land of the Rising Sun but promised to return someday. Hearing these stories, Cortez gathered a force of Spaniards and sailed to Mexico. There he found Veracruz. The landing of Cortez was looked on by the natives as a return of the gods in their white-winged ship. The Indians had never seen horses before. The Indians thought the steel-clad Spaniards riding horses were halfman, half-beast. These new gods were capable of making thunder and lightning with strange sticks they carried. Montezuma sent gifts to appease these strange gods so they would go away. Once Cortez and his men saw the gifts there was no turning back. One gift was a great wheel made of solid gold. Another like it was made of silver. Cortez reached the Aztec capital of Tenochtitlan by a forced march during November 1519. There he viewed great palaces, temples, and gardens. He was received with great ceremony and was given a palace to live in. His men were treated royally. A fight broke out between the Spaniards and the Aztecs when Cortez had Montezuma taken prisoner. Aztec arrows were no match for Spanish armor, horses and guns. Within a short time the Aztecs were conquered. Cortez sent shiploads of gold and silver from Mexico to Spain. Spain was on her way to becoming a wealthy, powerful nation. She no longer needed to pursue the Far East trade for riches.

Francisco Pizarro accompanied Balboa across Panama. He heard tales of a land rich in gold to the south. It was ruled by a group of

Indians called Incas. Inca meant “Children of the Sun.” These people decorated their temples and palaces with silver and gold. Pizarro asked for help from Panama but was refused. He went back to Spain and asked the king for authority to conquer the land of the Incas. Today this land is known as Peru. In 1531, Pizarro returned to Panama. A year later he led an expedition against the Inca cities high in the Andes mountains of Peru. The Incas received Pizarro as a guest. Pizarro was awed by the civilization of the Incas. They had temples built from stones fitted so tightly that a knife blade could not be placed between the blocks, even though no mortar or cement was used to hold them together. Pizarro was taken to the Temple of the Sun. Atahualpa, the Inca king, lived there. The walls were covered with gold plates. Pizarro tricked his host and made him a prisoner. The Incas offered to pay a ransom for his release. They would fill a room with gold, higher than Pizarro could reach. Another room, twice as large, would be filled with silver. Pizarro agreed. Word was sent throughout the land of the Inca. Gold and silver began to pour in. When the ransom was complete, Pizarro had Atahualpa put to death. The Incas were enslaved. Pizarro was killed by one of his own men when a quarrel broke out over dividing the treasure.

Hernando De Soto was with Pizarro in Peru. He later became the governor of Cuba. In May, 1639, he led an expedition of 550 men to Florida to search for gold. For two years the Spaniards fought the swamps, rivers, and forest of the land that would someday become the southeastern United States. In 1541, De Soto reached a great river that the Indians called “Father of Waters.” It was the Mississippi. He claimed it and all the land it drained for Spain. De Soto crossed the river and pushed on for another year looking for gold. Finally, with most of his horses gone and his army half-starved and sick, he returned to the great river. He died there and was buried in the river he discovered.

CAT-O-NINE JUSTICE

Your name: _____ Your Ship’s name:_____

Directions: Begin this LOG ENTRY on the bottom of this sheet. If you wish to write a long entry, use the back of this sheet and another sheet . Write legibly and accurately. Be creative!

Situation: You are still becalmed. It has been weeks since the sails have filled with air. Food is bad. Since there has been no rain to catch, fresh water is running dangerously low. Far worse, scurvy has broken out. One man was caught hoarding raw potatoes in the ship’s hold. The captain ordered the man flogged with the cat-o-nine tails. The cat-o-nine is a whip made from nine leather straps. The entire crew was ordered to watch the beating. The man was beaten until his back was bloody. Then he fainted. After salt water was thrown on the man’s raw wounds, he was dragged below and thrown in irons.

Entry: Tell about the conditions on the ship during the past weeks. How is the crew reacting? What have you been doing? Discuss the man who was beaten and how you feel about his beating. What do you think you would have done if it had been up to you to decide what to do about the man who hoarded potatoes?

EMERGENCY MAP-MAKING ASSIGNMENT

Situation: There has been a grave accident. Yesterday the captain of your ship had his map of the Caribbean area on deck. He had laid it out on a little table so he could study it in the light of day. Later, he left the map on the table to attend to other duties. When he turned in for the night, he forgot to retrieve the map. During the night a light rain fell. This morning, the map was soaked and barely readable. Worse yet, it is stuck so tightly to the table that any effort to pick it up will ruin it altogether. The map is a necessary element to the success of the voyage. The whole crew is ordered to try to duplicate the map as best they can. Follow the directions given below as closely as you can. They will give you your next movement in the game.

1. Use a clean 8.5" x 11" sheet of plain paper. Draw the best map of the Caribbean area that you can. Do not attempt to trace a map. You will get more score with a hand-drawn map. The early maps used by sailors were not very accurate. Yours is not expected to be perfect. Neatness counts for extra points.
2. Your map should include the following:
 - Mexico and the southern part of the United States
 - All of Central America
 - All of the West Indies
 - Northern part of South America(5 points)
3. Tenochtitlan, the Aztec capital, was where present-day Mexico City now stands. Draw a small pyramid on that location.
(1 point)

4. The Mayas were an advanced Indian culture that lived in southeast Mexico, Guatemala, Honduras, and Nicaragua. Print the word Mayas across that area.
(1 point)
5. The Arawaks were Indians who lived on the four islands of Cuba, Hispaniola (Haiti-Dominican Republic), Puerto Rico, and Jamaica. These islands are known as the Greater Antilles. Print their names and the word Arawaks near them.
(4 points)
6. The Caribs were Indians who lived in the northern part of Venezuela and on the Lesser Antilles. The Lesser Antilles are the smaller islands between the Greater Antilles and South America. Print Lesser Antilles in the proper place and the word Caribs in both areas where it belongs.
(2 points)
7. Locate the cities of Veracruz, Portobelo, Cartagena, and Havana with a dot and print their names.
(1 point)
8. Print the following in the proper location.
(1 point each)
 - Gulf of Mexico
 - Caribbean Sea
 - Pacific Ocean
 - Yucatan Peninsula
 - Bahama Islands
 - Land of Flowers

*It you and your shipmates do all of the above **properly** and **neatly**,
you stand to move 20 dots on your next move.*

LAND HO!

Your name: _____ Your Ship's name: _____

Directions: Begin this LOG ENTRY on the bottom of this sheet. If you wish to write a long entry, use the back of this sheet and another sheet . Write legibly and accurately. Be creative!

Situation: You have now been at sea for many weeks. There have been many shipboard problems during that time. The stores of food and fresh water were depleted while you were trapped in the long period of calm. You have just experienced some contact with a tropical storm. You are now forced to make a landing at the first landfall you see to search for food and water. The ship must anchor quite a distance from shore because of shallow reefs. You must get to shore by rowing a small boat through the rough water. When you get there, you discover a large party of natives waiting for you. They are armed and outnumber you.

Entry: Tell about recent events aboard your ship. What were your feelings when land was at last sighted? What were the circumstances? Were there prior indications that land was near? Tell about going ashore. How did you communicate with the natives? Or didn't you? What were they like? Describe them. Are they friendly? Make up a story about the whole episode.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

PHASE II RULES

Instructions:

Read and follow these rules carefully.

1. Fill in your crew members' names and the ship's name on your PHASE II MOVE RECORD sheet.
2. Find the horizontal column marked #5 with a * and starting with the words "Add BONUS from ...". If you have leftover moves, they are not lost. Do the following:
 - a. Divide the number of moves by 10.
 - b. Round off the quotient to the nearest whole number.
 - c. Place this number in the "bonus" column (column #5) for the 10 turns.
 - d. Add this number to your team total for each of the 10 turns as a bonus.
3. There are no set routes in this phase as there were during Phase I. Therefore, moves are calculated on the basis of the number of degrees earned rather than dots.
4. However, all moves must be made along a specific longitudinal line or a specific latitudinal line or a combination of the two. For example, if your ship's crew earns 8 degree moves and the ship's position is 25 degrees N-30 degrees W, your ship may move north or south 8 degrees on the 30 degrees longitudinal line; or east or west 8 degrees on the 25 degrees latitudinal line; or any combination such as, 4 degrees north and 4 degrees east to a new coordinate position.

Note: You cannot, of course, move over land, so you must adjust your course, accordingly.
5. Moves are earned by crews taking short five question MOVE QUIZZES which the teacher gives to everyone. Each member must take the test individually on answer slips without help from his/her "mates." The quiz answer slips are then given to the captains, who exchange them with other captains. Next the teacher tells you the answers. Each correct answer gets a plus 2 and all correct plus 2s are added and the total score is placed on top of the slip. Of course, "10" is a perfect score. Answer slips are then returned to the original captains. The captains quickly figure a crew average by dividing the total of all answer slips by the number of crew members. This process gives all Galleons the number of degree moves for this turn. However, because its ship is lighter and more maneuverable, the Privateer may double its score.
6. After the teacher finishes with the MOVE QUIZ, he/she will have the captain draw a FATE CARD. The teacher will read the FATE CARD. The captain must then take into account whatever FATE has dealt the crew in plotting his/her ship's next moves.

Note: This act is done mathematically on the MOVE RECORD by placing the FATE effects in the proper column.
7. The ships' captains will then decide how and where their ships should go. They will put their routes and their ships' new positions on a slip of paper and give them to the teacher secretly. After all ships' captains have turned in their route slips, the teacher will post the ships' new locations and indicate each ship's route. Of course, no ships may move more than the degrees earned during any given turn. However, a ship's captain may decide to move less than the moves earned. But if the captain does move the ships less, any excess moves are lost.
8. To make contact with another ship, your ship must end up at the end of a turn within 2 degrees latitude and 2 degrees longitude of the other ship.

PHASE II RULES

9. If contact is made, there are three options:

- a. **OPTION 1:** Your captain may decide to engage the other ship in battle. If so, the teacher will line up each crew member facing one another and then ask five CONTACT QUESTIONS orally, one at a time, of each pair of crew members facing one another. The first member to raise his/her hand may answer first. If he/she is correct, his/her crew receives 2 degree points. On the other hand, if incorrect and the opposing crew member is correct, the later crew member receives 4 degree points. (Hence, it doesn't pay to be too hasty in raising your hand.) If both members raise their hand at the same time, the teacher will flip a coin to see who goes first.

Note: The Privateer receives the same award as a Galleon since this action is designed to simulate a one-on-one boarding battle situation.

After each crew member has responded, the crews' totals are announced. (Some members may have to go twice if the crew has less than five members. Some may have to "double up" on an opponent if the crew has six or more.) The crew with the highest score wins not only its own degree points, but also those of the other ship's Booty." (In case of ties, the teacher will ask each captain "tiebreakers" until one misses. No degrees are awarded in this case, however.) The losing ship is now considered sunk and its crew members dead.

Note: This option would most likely be used by the Privateer against a Galleon, since the Privateer has no gold of its own and is under orders to attack Spanish ships. By contrast, for one Galleon to attack another would normally be foolhardy, since the risk of losing everything would not be worth the degrees gained.

- b. **OPTION 2:** Your captain may try to sail away under the cover of night. If your captain chooses this option, your teacher will ask your crew five questions of five different crew members. All five questions must be answered correctly for your ship to escape. If any crew member fails, such failure becomes a fatal "slip-up," and the other ship captures your ship and takes whatever

degree points your crew has earned. This ship's captain can first order all of you to "walk the plank" and then can sink your ship; or he/she can take you prisoner, add you as "slave" labor for his/her crew, and force you to answer questions for his/her ship; or he/she can simply let you go—after "robbing" you of whatever degree points your crew has accumulated.

- c. **OPTION 3:** Your captain joins forces with some other ship. The chief advantage of "sailing together" is that both crews are available to answer the five CONTACT QUESTIONS. The two captains can decide which five members will answer or can pair members for this duty. The chief disadvantage is that both ships must, from now on, sail the same mutually agreed upon course and if they win the race back to port, they must share the king's prize.

10. The first galleon to reach either La Coruna or Cadiz wins the king's first prize. (The prize will be determined by your teacher, but it may be an "A" grade, more recesses, or a big candy bar or ?) The ship nearest port after the winner wins second place. All others are rated as third place finishers, except, of course, those who were sunk. They are rated last. If ties occur, then duplicate awards are made. In such a case your teacher may decide to lower your prize one rating. For example, if two ships tie for first, the crews would receive "Bs" rather than "As."

11. The privateer, however, serves a different king. Hence, his prize options are different. If he/ she sinks three or more galleons, a first rating is received as well as whatever prize the first-rated galleon received; if he/ she sinks two, a second rating; and if he/she sinks one, a third rating. If he/she sinks no ship and/or if he/she has sunk ships but has then also been sunk before the end of the Phase II, he/she receives a last rating.

12. Your teacher may wish to hold a public ceremony during which the winning crew(s) and its captain(s) are awarded medals for service to their country.

MOVE QUIZ 1

Your name: _____ Your Ship's name: _____

Match the characters on the right with the descriptions on the left by putting the proper numbers in the blanks.

- | | |
|--------------------------------------|------------------|
| _____ New World named for him | 1. Cortez |
| _____ searched for fountain of youth | 2. Vespucci |
| _____ discovered the Pacific | 3. Magellan |
| _____ first to sail around the world | 4. Ponce de Leon |
| _____ conquered the Aztecs | 5. Balboa |
-

MOVE QUIZ 2

Your name: _____ Your Ship's name: _____

Circle the correct answer from the four choices following each question.

- How many weeks did it take Magellan to sail through the strait that now bears his name?
(a) one (b) two (c) three (d) four
- The Turkish conquerors of the Holy Land were:
(a) Hindus (b) Muslims (c) Buddhists (d) idol-worshippers
- The Aztecs lived in:
(a) Florida (b) Peru (c) Cuba (d) Mexico
- During the Dark Ages the Europeans made cloth from:
(a) cotton (b) silk (c) wool and flax (d) animal hides
- Where are the horse latitudes found?
(a) 0-10 degrees (b) 10-20 degrees (c) 20-30 degrees (d) 30-40 degrees

MOVE QUIZ 3

Your name: _____ Your Ship's name: _____

Circle T for true or F for false to answer the following statements.

- T F 1. Magellan received a hero's welcome when he returned from his round the world trip.
- T F 2. Marco Polo spent 24 years in the service of China before returning to Europe.
- T F 3. Palos had to supply Columbus with ships and crews because the town had been convicted of smuggling.
- T F 4. Balboa was executed for treason.
- T F 5. The Aztec horses were much slower than the Spanish horses.
-

MOVE QUIZ 4

Your name: _____ Your Ship's name: _____

Fill in the blanks with the proper answer.

1. Before Columbus, early sailors called the Atlantic Ocean the _____.
2. Columbus discovered America in the year _____.
3. The number of men that completed the first round-the-world voyage was _____.
4. In his book, Marco Polo claimed the palaces of Cathay were roofed with _____.
5. Barthomeu Dias named the southern tip of Africa the Cape of _____.

MOVE QUIZ 5

Your name: _____ Your Ship's name: _____

Match the characters on the right with the descriptions on the left by putting the proper numbers in the blanks.

- | | |
|-------------------------------------|------------------|
| _____ conquered the Incas. | 1. Dias |
| _____ discovered the Mississippi. | 2. De Soto |
| _____ all-water route to India. | 3. Henry Morgan |
| _____ discovered Cape of Good Hope. | 4. Pizarro |
| _____ English pirate | 5. Vasco da Gama |
-

MOVE QUIZ 6

Your name: _____ Your Ship's name: _____

Choose the correct answer from the four choices following each question.

- The ruler of Cathay when Marco Polo visited was:
(a) Montezuma (b) Atahualpa (c) Kublai Khan (d) El Draque
- The general direction of the winds that blow across Cuba, Hispaniola, Jamaica, and Puerto Rico is:
(a) northwest (b) northeast (c) southwest (d) southeast
- Scurvy is caused by:
(a) mosquitoes (b) poor diet (c) being at sea too long (d) salt water
- What kind of merchants were the Polo brothers?
(a) jewel (b) cloth (c) spice and tea (d) ivory
- Which of the following countries did Columbus not go to with his plan to reach the east by sailing west?
(a) England (b) Spain (c) Portugal (d) Germany

MOVE QUIZ 7

Your name: _____ Your Ship's name: _____

Circle T for true and F for false to answer the following.

- T F 1. Pizarro was welcomed as a guest by the Incas when he first got to Peru.
- T F 2. Kublai Khan was ruler of the Aztecs.
- T F 3. The first man to reach the southern tip of Africa was Barthomeu Dias.
- T F 4. Prince Henry was thrilled with the discovery of an all-water route to India.
- T F 5. The astrolabe could be used to measure latitude only.
-

MOVE QUIZ 8

Your name: _____ Your Ship's name: _____

Fill in the blanks with the proper answer.

1. The rudder of the _____ broke on Columbus' first voyage.
2. Henry Morgan was helped by a herd of stampeding bulls when he captured _____
_____.
3. _____ is a disease contacted from mosquitoes.
4. The Indians called the Mississippi River the _____
5. Goods had to be moved across the Middle East by _____
caravan to get to India.

MOVE QUIZ 9

Your name: _____ Your Ship's name: _____

Match the characters on the right with the descriptions on the left by putting the proper numbers in the blanks.

- | | |
|--------------------------|----------------|
| _____ Queen of Spain | 1. John II |
| _____ Queen of England | 2. Henry |
| _____ King of Spain | 3. Elizabeth I |
| _____ King of Portugal | 4. Isabella |
| _____ Prince of Portugal | 5. Phillip II |
-

MOVE QUIZ 10

Your name: _____ Your Ship's name: _____

Circle the correct answer from the four choices following each question.

- Columbus began his journey from:
(a) Palos (b) Cadiz (c) La Coruna (d) Veracruz
- Who was given the title "Admiral of the Pacific?"
(a) Pizarro (b) Balboa (c) Magellan (d) Columbus
- The Indians who were native to the Greater Antilles were the:
(a) Caribs (b) Arawaks (c) Mayas (d) Aztecs
- Magellan:
(a) was killed by a native (b) died of scurvy
(c) was executed (d) was killed by one of his own men
- The first man to reach India by an all-water route was:
(a) Dias (b) Marco Polo (c) Magellan (d) Da Gama

PHASE II MOVE RECORD

Your Ship's name: _____

MOVE QUIZZES

Crew Members	1	2	3	4	5	6	7	8	9	10
1. Total team points										
2. Divide 1 by number of crew members										
3. Multiply 2 by 2										
4. Add or subtract effects of FATE BULLETINS										
5. Add Bonus from leftover Phase I moves										
6. Sum of 1, 2, 3, 4, and 5 is Total Degrees your ship may move										
7. New position in Latitude										
8. New positions in Longitude										

FATE BULLETINS

Note: These 38 Phase II FATE BULLETINS are coded by number to 38 numbered slips you keep in a shoebox for drawing during Phase II.

1. A fire has broken out below decks. All hands must turn out to fight the fire. Meanwhile the ship drifts aimlessly. You will lose time getting back on course. Flip a coin three times. Lose one degree for each tail.
2. The wind is dying. Roll one die. The number rolled represents the degrees you lose this move. (Roll a six and this fate is not yours.)
3. Good sailing skill has increased your move. Pitch a coin at the wall from three meters away. If it comes to rest within 10 cm. of the wall, add 2 degrees to your move. If it is within 20 cm., add one.
4. Same as number 3 except pitch the coin from four meters away.
5. Same as number 3.
6. Same as number 3.
7. Same as number 3.
8. Same as number 3 except pitch the coin from 5 meters away.
9. Your rudder has become stuck. You may not change directions during this round. You must sail in the last direction of your previous move. You need not move all the degrees you have earned, but if you do not, you lose those degrees.
10. Your ship has sprung a leak below the waterline. It is near the bow of the ship. To ease the pressure on the hull while you attempt to plug the leak, you must drop the sails and allow the ship to stop. If one of your classmates has signed on as ship's carpenter, you lose only one degree. Otherwise, flip a coin. Lose one degree for every tail flipped. Keep flipping until you get a head.
11. If you are between 26 degrees N latitude and 34 degrees N latitude, and between 80 degrees W longitude and 64 degrees W longitude, your compass is acting very strangely. It wanders and spins aimlessly. You have heard strange stories of this region before. Roll a die to see where you will end up when your compass stops acting up. Roll a one and you are at 26N by 72W. Roll a two and you are at 32N by 72W. Roll a three and you are at 30N by 80W. Roll a four and you are at 26N by 64W. Roll a five and you are at 32N by 64W. Roll a six and this fate is not yours.
12. Fair winds push you along. Crumple a sheet of paper and have one of your crew throw it at the wastebasket from four meters away. Each basket adds one degree to your move. You get three chances.
13. Same as number 12 except throw from only three meters away.
14. Same as number 12.
15. Same as number 12.
16. Same as number 12 except throw from five meters away.
17. The helmsman fell asleep during the night. The ship went off the intended course. The first four degrees you make on this move must be due south. Hope that you don't run aground. If you do, lose the rest of this turn.
18. You have run out of fresh water. A squall line is visible to the north. If you can get to it, you can collect rainwater off the sails. Throw die to see how many degrees you have to move north before you hit rain.
19. You have an uneventful week of sailing. No fate.

FATE BULLETINS

20. Same as number 19.
21. Same as number 19.
22. Same as number 19.
23. Same as number 19.
24. Some of the deckhands have attempted a mutiny. They controlled the ship for a short time and turned it back toward the New World. You managed to retake the ship after a short time, but you have lost some ground on your voyage. Throw a die. it will show how many degrees you must move west before you can resume your original course.
25. There are strong winds today. Have one of the crew members make a paper airplane. If you can throw it into the waste basket from five meters away you will gain one degree for each success. You get five tries.
26. Same as number 25 except throw from three meters away.
27. Same as number 25.
28. Same as number 25.
29. Same as number 25 except throw from six meters away.
30. A storm has hit with terrible force. You must drive before it or be shipwrecked. Blindfold one of the crew members in some fashion. Determine where north, south, east, and west are in the room. Spin the blindfolded crew member around five to 10 times. With everyone in the room quiet to prevent coaching, the crew member must stop turning under his/her own power. Whichever direction he/she is facing at the stop is the direction the ship must take this next move. if a contact is made with this ship during the round, there will be no battle because of the storm.
31. You are surrounded by fog. You can sail but cannot see. Should a contact be made this round, roll one die. If the number rolled is even, the contact is made. If the number rolled is odd, the contact was missed because of the fog.
32. Fair winds. Add one degree.
33. Poor winds. Lose one degree.
34. A storm tore your main sail to shreds. If one of your classmates has signed on as sail-maker, lose only one degree. If not, drop five pennies to the floor. Lose one degree for every tail.
35. If you are west of 60 degrees W longitude and south of 36 degrees N latitude, you have run aground on an uncharted coral reef. There seems to be no severe damage to your ship, but you are temporarily stranded. To get off the reef you have two choices. You may lighten your ship by dumping your cannons overboard, and you may then take the moves earned. If you do this and meet the enemy, you are automatically captured. Your second choice is to wait for the tide to take you off. This will not happen until next round so you lose this turn.
36. A favorable current aids your progress. You have a choice. Add one degree automatically or try to call three coin flips. One correct call gets you nothing. Two correct calls add three degrees. Three correct calls add five degrees.
37. Same as number 36.
38. Same as number 36.

CONTACT QUESTIONS

Directions: These questions are for use in contact situations. (See Rule 9 in PHASE II hand-out.) You may read them out loud in any order, one at a time, as the need arises. The 30 given here should be enough, but you may add more or substitute your own from your own materials if you wish. The answers are in parentheses. Tell your students to answer TRUE or FALSE. If they say FALSE, they must explain why the statement is false.

1. How were the Inca temples built? (Of blocks so perfectly made that no cement was necessary)
2. Who was the Incan king for whom the Incas offered to pay the Spaniards a ransom? (Atahualpa)
3. What is another name for the Hebrew Christian Holy Land? (Jerusalem)
4. What was the Spanish name for a famous English privateer? (El Draque)
5. What was the main reason the Indians were so easily beaten by the Spanish? (Had no guns or horses)
6. What is the name given the period of time when the Europeans had few comforts? (Dark Ages)
7. Which ship did Columbus buy on his first voyage? (Nina)
8. In the Incan Temple of the Sun, the walls were covered with what? (gold plates)
9. What was Atahualpa's ransom? (a room filled with gold)
10. The wars between the Christian Europeans and the Muslim Turks were called what? (Crusades)
11. Who was the governor of Jamaica during this time? (Thomas Modyford)
12. Who discovered the Pacific Ocean? (Balboa)
13. Who was the ruler of the Aztecs? (Montezuma)
14. Who was the king of Spain who commissioned Columbus? (Ferdinand)
15. Who was the ruler of China? (Kublai Khan)
16. De Soto was buried where? (Mississippi River)
17. The Aztecs thought Cortez was a what? (White God)
18. Henry the Navigator was a prince of what country? (Portugal)
19. Winds that blow steadily in one direction are called what? (trade winds)
20. Who were forced to put ladders up for Morgan at Portobelo? (priests and nuns)
21. Tenochtitlan was built where? (on an island in a lake)
22. When Cortez landed in Mexico, what did the Aztec king send him? (a golden wheel)
23. Which of the following did not help the Spanish defeat the Indians: horses, guns, armor, chariots? (chariots)
24. The Indian word Inca means what? (children of the sun)
25. Tierra del Fuego in Spanish means what? (land of fires)
26. The Aztec capital was called? (Tenochtitlan)
27. The southern tip of Africa was renamed by King John II of Portugal to what? (Cape of Good Hope)
29. What did Columbus name the first land he saw in the New World? (San Salvadore)
30. The area of calm near the equator is called what? (doldrums)

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Learn Through Experience

INTRODUCTION

Long before the United States was a nation and very few Europeans had ever seen this land, men braved the turbulent ocean in tiny, wooden sailing ships to reach the shores of the New World. You will soon have the opportunity to find out a little of what it was like. You and your classmates will be teamed together to form crews for a transoceanic adventure. Since you will be competing with other teams, it is important that you pay careful attention and do your best on the upcoming assignments.

THE LURE OF THE NEW WORLD In the 1500s one of the countries most interested in exploring new lands was Spain. Columbus had discovered that land could be reached by sailing westward across the uncharted ocean. His discovery served to give Spain a headstart in claiming lands in the New World. In the years that followed, Spaniards came to the New World for various reasons. Some sought to gain possession of land. Others came to convert the Indians to Christianity. Most, however, were adventurers who came seeking their fortunes. They came to search for the water route that would lead to the riches of the Far East. They came to establish trade and commerce. They came to find gold, silver, and other valuable goods. As these fortune-hunters spread farther and farther across the lands of the New World searching for riches, they carried their country's flag with them. Everywhere they went they claimed the new land for Spain.

SPANISH ISLAND SETTLEMENTS The islands of Cuba, Hispaniola, Jamaica, and Puerto Rico were the first major settlements in the New World. These four large islands nestled in the area that was most easily reached from Spain. They lay in the path of the trade winds that blew southwestward across the Atlantic Ocean at that particular latitude. (Check the map in this Student Guide.) These islands eventually became important stepping stones for Spanish ships on their way to the mainland after gold was discovered in Central America and South America.

THE SPANISH AND THE INDIANS The Spanish treatment of the Indians was for the most part harsh and cruel. On the island settlements of the West Indies, the Spanish quickly conquered the peace-loving Arawak Indians who lived there. These Indians were made to work on Spanish farms and in Spanish mines. Within 50 years, the population of Arawaks on

the islands was nearly depleted. Those that had not been killed outright by the Spanish were often worked to death. Many other starved. All the Indians suffered from European diseases such as smallpox. Because the Indians had never before been exposed to these diseases, they did not have any natural immunity to them. Not all the Indians, however, were conquered as easily as the Arawaks. Many, such as the Aztec warriors, fought valiantly to beat off the Spanish. The Indians lacked the guns, horses, and armor that the Spanish had. In the end, it was always the same. The Spanish ruled the land.

HAZARDS OF TRAVELING Persons who went venturing to the New World faced many hazards, real and imaginary. To begin with, they had heard tales of mighty serpents and sea monsters lurking in the "Sea of Darkness," waiting to drag ships down into the depths and swallow them whole. Beyond the stories, the dangers were real. A trip across the waters often lasted 60 days or more. During this time the ships were at the mercy of the winds and currents. The Caribbean area was noted for frequent hurricanes. Storms would drive ships hundreds of miles off course. Some ships smashed on uncharted reefs. Others drifted for endless days on windless seas. Food and fresh water would run out, leaving crews to die of starvation or thirst. All in all, these dangers were very real and required great courage of the crews.

After making the trip successfully across the ocean, the seafarers had to contend with the natives of the New World. Many were openly hostile to the men of the ships with their great, white wings. Battles took place with persons on both sides being slaughtered. Shipmates often died by the score from malaria, a disease they picked up in the mosquito-ridden jungles.

GOLD Before Columbus' voyage, Spain had become nearly bankrupt by waging costly wars. The discovery of gold in the New World transformed Spain from a poverty-stricken nation to one of the richest, most powerful countries of Europe. Spain was able to build up her armies and construct powerful ships. Spain's treasure ships, called galleons, began to cross the Atlantic Ocean regularly.

The galleons struck sail for the New World treasure towns of Veracruz, Portobelo, and Cartagena. There they took on their rich cargo. Ships loaded with treasure from the mines of Mexico and Peru assembled at Havana, Cuba. Then they would often join together into fleets to protect

themselves from privateers and pirates. Galleons laden with treasure from the New World became a common sight in the Spanish seacoast towns of La Coruna and Cadiz. Each ship that made the voyage successfully made Spain all the more wealthy and powerful.

PRIVATEERS England and Spain became bitter rivals during the years that Spain's power and influence were growing. In an effort to stop the gold flow from the New World to Spain, English rulers openly encouraged English ship captains to make raids on Spanish treasure ships. These men became known as privateers. The Spanish called them "sea dogs." One of the most famous of the privateers was a man the Spanish called El Draque (pronounced El Dra-kay). He was later knighted by Queen Elizabeth of England as Sir Francis Drake. While the privateers had to be careful around Spanish strongholds, the islands of the West Indies made excellent hiding places to lie in wait for the treasure ships.



— YOU AND YOUR SHIPMATES —

It is almost time for you to be assigned to a ship. There will be five or six different crews representing different ships. Over the next two to three weeks you and your group will simulate moving across the vast expanse of the Atlantic Ocean. Most of the ships will be Spanish galleons bound for the New World to pick up treasure. However, one group will represent English privateers, on orders from their sovereign to disrupt the flow of gold from the New World.

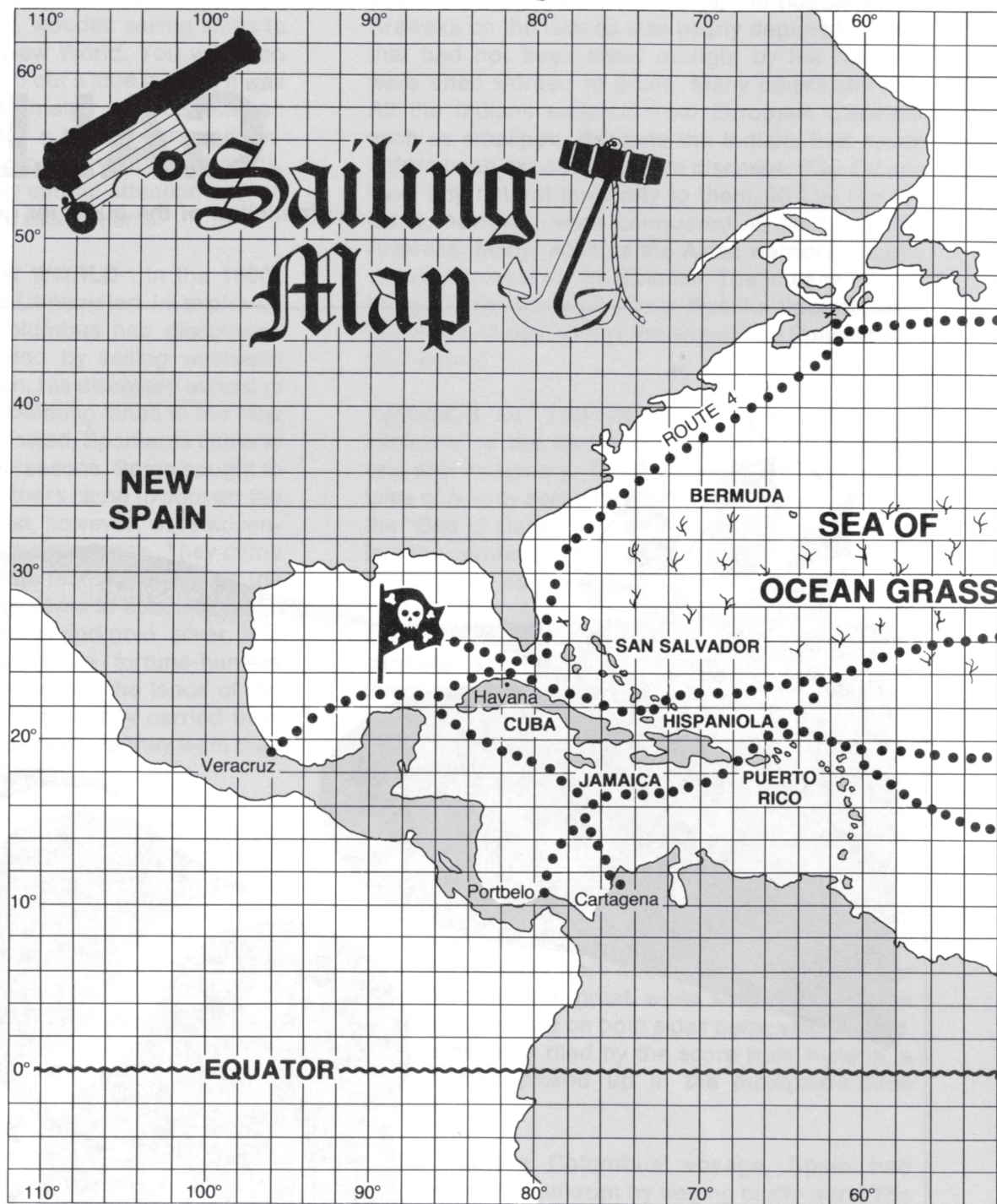
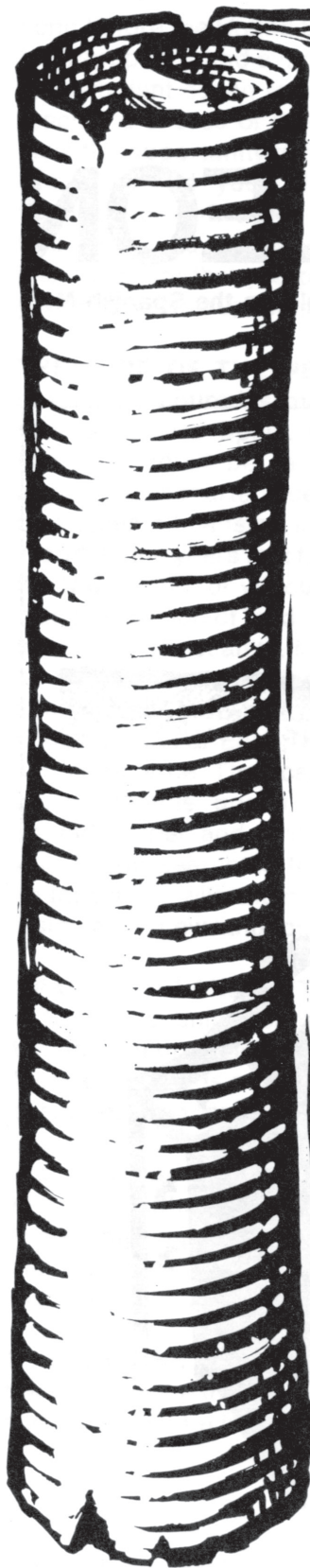
MOVING THE SHIPS Your ships will gain their movement from the assignments that you complete. The first goal in Phase I of the simulation is to get your group's ship to the New World as quickly as possible. Everyone's effort is important. The better your team works on the assignments, the faster your ship will move across the Atlantic Ocean map. A ship's movement will be penalized for any crew member's uncompleted or poorly done assignment. The ship's captain has the re-

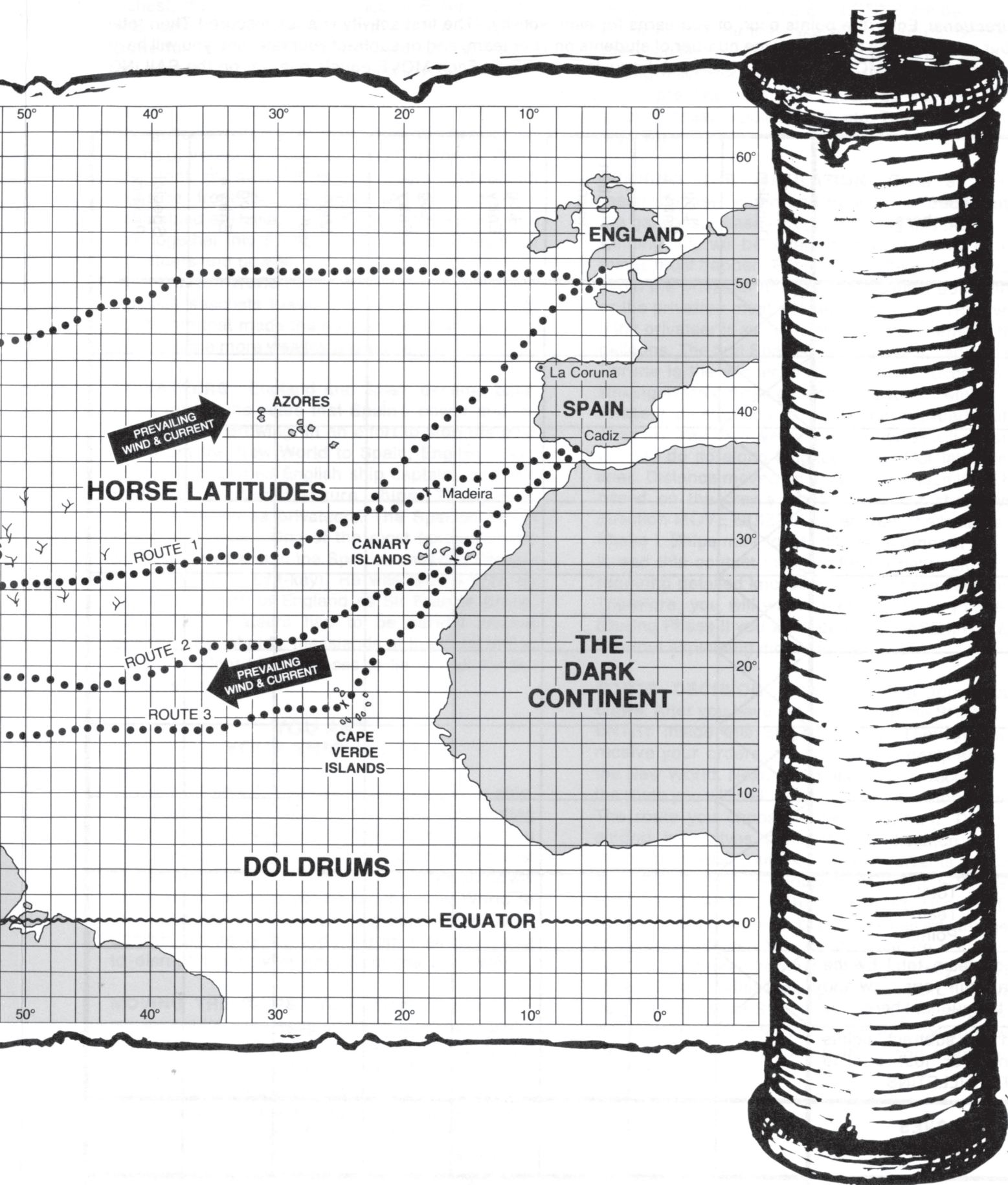
sponsibility for seeing that the ship's crew pulls together and does a good job on the assignments.

FATE BULLETINS As your ship moves across the ocean, a series of FATE BULLETINS will be read to represent events that take place enroute. Some of these bulletins will represent good things, such as strong tailwinds, that will speed you along. Others will represent hard luck, such as storms, leaky ships, disease, spoiled food, etc. These things may slow your trip.

WINNING THE SIMULATION Once all ships reach the New World and treasure is loaded onto the galleons, Phase II begins. During this phase the winning ship will be determined. To win, one of two things must happen. Either one of the galleons must avoid the privateer and reach a Spanish port safely or the privateer must sink all the galleons. However, if the privateer is sunk, it becomes a race among the galleons. The first Spanish ship to reach Cadiz or La Coruna is the winner. If the privateer succeeds in sinking a least three galleons, it also is a winner. In Phase II, all ships do not follow a prescribed route. They are free to move over the ocean at will as long as they do so along longitudinal and or latitudinal lines. Distance moved on the map in Phase II will be based on the crew's ability to answer short five-question MOVE QUIZZES taken from the lessons in Phase I. Ships may "contact" one another in Phase II, and this contact may produce a battle situation requiring detailed knowledge from Phase I lessons. Therefore, you will want to work hard in Phase I. (During Phase II you will receive a PHASE II RULES handout explaining moves and battles.)

ROUTE DECISION Now you must form your crews. After you have done so, fill out the SHIP LOG ENTRY inside this Student Guide. Then you will receive your orders to sail and your destination in the New World. Next, you must make a decision on the route you will sail. Don't take this decision lightly. The route you choose is very important. Discuss among yourselves many things: distance to be traveled on each route, winds and currents, places to stop for repairs, resupplying your ship with fresh food and water. (Don't forget the FATE BULLETINS!) Of course, each route has advantages and disadvantages. You must anticipate both. But be sure you remember that the trip one way will last about 60 days. While making your decision, fill in the ROUTE DECISION SHEET as thoroughly as possible. **Note well:** How far you go on your first turn will be determined by how thoughtfully and neatly you fill out this sheet.





Ship Log Entry

Let it hereby be entered into our ship's log that the undersigned mariners have signed on as crew for the good ship,

_____, *which has been duly commissioned into the service of*

_____, *the country that we love.*

Captain:

First Mate:

Sail Maker:

Cook:

Storekeeper:

Carpenter:

ROUTE DECISION SHEET

Name of ship: _____ Crew members: _____

Listed below are the many routes you may sail to the New World. Here is a key for the abbreviations:

S = Spain	CI = Canary Islands	CVI = Cape Verde Islands	R3 = Route 3
R1 = Route 1	R2 = Route 2	P = Portobelo	V = Veracruz
C = Cartagena	E = England	M = Madeira	

Routes to Portobelo:

S-CI-CVI-R3-P
S-CI-R2-P
S-CI-R3-P
S-M-R1-P

Routes to Cartagena:

S-CI-CVI-R3-C
S-CI-R2-C
S-CI-R3-C
S-M-R1-C

Routes to Veracruz:

S-CI-CVI-R3-V
S-CI-R2-V
S-CI-R3-V via Cuba/
San Salvador route
S-CI-R3-V via Hispaniola/
Puerto Rico route
S-M-R1-V via Cuba/San
Salvador route
S-M-R1-V via Hispaniola/
Puerto Rico route

Study the above routes. Choose three or four to analyze. List these routes' advantages and disadvantages. Then mark with a * the main advantages and with a the main disadvantages that shaped your decision. (You may use other paper if you wish.)

Route	Advantages	Disadvantages
We chose this route:		
Signed by captain:		

PHASE I MOVE RECORD

Directions: Enter the points each of you earns for each activity. (The first activity is a team score.) Then total your points, divide the total by the number of students on your team, add or subtract your fate, and you will have calculated your MOVES earned. (Each point equals one MOVE. Each MOVE equals one dot on the SAILING MAP.)

Crew Members	Route Decision	Log Entry 1	Navigation Lesson	Log Entry 2	Log Entry 3	Map-making Assignment	Log Entry 4	Special Project
Total Team Points								
Divide team total by the number in your crew and put the quotient here								
Add or subtract points gained or lost due to FATE BULLETINS								
MOVES earned								
GRAND TOTAL OF MOVES	<div> Add together all MOVES earned </div>							