

FINDING YOUR WAY WITH MAPS

CHAPTER 3

CHARTING YOUR COURSE

Now that you've finished your refresher course, (how did you do on the test?) are you chomping at the bit to get started? Wait just a moment... you may want a quick education on outline maps. Here are instructions, map facts, map activities, and ideas to get you going! Chapter fifteen is packed full of brand new outline maps just for you.

Outlines Maps: *How to Choose Them, How to Use Them, How to Fuse Them into Your Curriculum*

Do you look at blank maps with a blank face? "How do I use this?" you may say. "It has absolutely no information on it!" Right you are. That's what makes outline maps fun - they're a great outlet for creative abilities.



What Exactly are Outlines?

An outline map is a simple black and white map which shows the shape of land masses only. It may include a nation's (or a state's) borders, but without any political details. Although some outlines may include geographical features such as rivers, there's no text (no labeling of places.) Don't be intimidated by blank space. It's really quite an interesting project to place information learned on the map. Using outlines, students will have an opportunity to organize geography and historical facts into a visual format. The information will be supplied by the student through a series of fun and interesting projects using atlases, history textbooks, and other reference materials.



Blank maps can be used across the curriculum. (Unit three is devoted to teaching interdisciplinary geography.) You'll find that almost weekly you can provide creative ways to incorporate mapping activities into your schedule. *The Ultimate Guide* provides you with an abundance of suggestions and lesson plans using outline maps. Don't try to do them all; but do try to use those that easily slip into your lesson plans. You'll soon see that outline maps supply some of the greatest cost effective, hands-on learning experiences your students can use. As you and your students get hooked, you may find yourself with enough completed outlines to paper your walls!

Why Use Outlines?

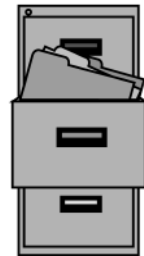
The benefits of using blank maps and adding to timelines are many. (Unit six guides you through the use of timelines and timeline figures.) Students who use blank maps gain valuable practice using reference materials. Learning to use reference materials effectively teaches one important, simple fact: we'll never know everything there is to know, but we can find the answer to any question if we know how and where to look it up.

Do your students forget much of what they've learned as soon as they've finished taking a test? Improve long-term memory retention by providing hands-on map activities associated with subjects. Much has been said about kinesthetic learners or those who learn by doing. The truth is, nearly everyone remembers better what they themselves have researched and recorded in an active way. Filling out an outline map or an outline timeline is just the ticket! (In unit four, you'll find "Conquering the Continents," an entire geography course for both middle school and high school written in just this style.)



Obtaining Outlines

Keep an assortment of outline maps in your resources file. Reproducible outlines in *The Ultimate Guide* are provided for use in your classroom. Included are maps of each continent, as well as a few other regional maps. If you'll copy them right away you'll have a file ready for use. When you want to use an outline activity, simply check your file. If the area you're studying is too small on the map supplied, just choose the map that includes the area you need and enlarge it. Some projects will require a larger map. Try copying in quadrants and taping it together. Better yet, purchase large-scale paper and laminated maps. See Resources.



The Nitty Gritty

Paper maps or laminated maps - which is best? Both! Which you use depends on your objective, type of assignment, and your students. Here's why...

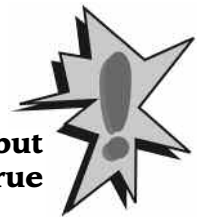
Laminated outlines

Laminated outline maps are durable and reusable. You may purchase maps already laminated, laminate your own paper maps, or cover them with contact paper. To write on laminated maps, use water-based pens. Overhead projector pens work best, because they leave a clear, bright line that doesn't bead up. Wipe clean with a damp paper towel or damp sponge. A damp sponge works best when trying to wipe off an area near another part you do NOT want erased. Wiping with the corner of the sponge is much easier to control than using a paper towel. Another advantage is that you can use a post-it note glue-stick with removable glue in order to post notes, stamps, postcards, etc., right onto the map. This special glue cleans off easily with warm water.



NEVER use dry erase markers on a laminated map. That's worth repeating: **NEVER** use dry erase markers on a laminated map! These markers are great for quick, write-on wipe-off presentations for corporate America, but not for students. Three reasons not to use a dry erase marker:

1. If you want the map to wipe completely clean, you can't leave dry erase markings on it for an extended length of time. They stain.
2. The fumes they give off can make your head spin - never a pretty sight!
3. Areas already labeled easily get accidentally bumped and smeared, causing tears of frustration (by students and teachers alike!) causing the project to lose its pleasure.



Amazing but True

Dry erase markers will stain a laminated map if not wiped off: use water-based overhead projector pens instead!

Additional hints regarding laminated maps may be helpful. People with sweaty palms may find they're smudging the map when their hand touches a labeled part. Place a piece of paper on the map under the hand, and you not only provide a barrier from smudging but also a straight edge on which to write the next word. If you use your laminated map a lot, pen marks may begin to bead up. The hand's natural oils (or peanut butter and jelly!) may leave a residue that needs to be washed off. Laminated maps are easily cleaned using any mild window cleaner.

Besides reducing the number of dog-eared maps you own, the greatest advantage to using laminated outlines is their reusability. A large laminated USA or world map posted on the classroom wall can have information added all year long. Or wipe it clean with every new project and start all over. Use different colored pens to differentiate between projects or time periods. When laminated maps are used in the home, they can be stored flat under the couch and brought out when needed if wall space is at a premium.

Paper Outlines

Paper outline maps are versatile because students can do their work in pencil, correct any mistakes, and then trace over the pencil with fine tipped markers, pens, or colored pencils. Students enjoy making thematic maps or physical maps with color. Permanent mistakes are frustrating and can spoil the fun of a project in a hurry.

Although many prefer the durability of laminated maps, paper outlines can be covered with clear contact paper for inexpensive lamination after projects are completed. Often, students want to preserve their work this way, especially if they took great care in labeling the map and enjoyed doing so. Students may place maps in plastic sheet protectors and store in a three-ring binder when not in use. This adds protection, and the sheet protector can be drawn on and wiped off with a water-based pen.

Another advantage of paper maps is that larger desk maps can be folded and stored in the student's pocket folder notebook. Fine tipped markers are best for high school level detailed labeling. (A good, fine-tipped marker that doesn't get mushed is called Stabilo Sensor #189. It's available at office supply stores.) Other students who like finer details will enjoy coloring, labeling, and designing a legend with colored pencils. This is very difficult to do with overhead projector pens on a laminated map. (Use erasable colored pencils if possible.)



Chapters with specific map assignments:

- Ch. 7 - Hans Brinker study
- Ch. 8 - Science
- Ch. 9 - Math
- Ch. 10 - "What Map Do I Use When Studying...?"
- Ch. 13 - 7 Continents: Middle School
- Ch. 14 - 7 Continents: High School

Now What?

Okay, so now you're no longer bothered by all that blank space and have even chosen which kind of map will suit your need. With marking pens or colored pencils in hand, you're ready to get started. But what goes on the map, and how is it done? What's the teacher's responsibility, and what's the student's job?

What Goes Where?

You may provide a list of what should be labeled as demonstrated in several chapters in *The Ultimate Guide*. Another way is to

allow daily lessons to provide what should go on maps as shown in the *Hans Brinker* study in chapter seven. Or use any of the other great examples and suggestions given throughout *The Ultimate Guide*. With practice, you'll come up with your own brilliant ideas that include the effective use of outlines.

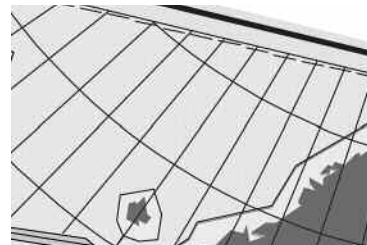
Students will use their own creativity when labeling their map, but it's best to get them started with clear directions. Specific guidelines such as, "Draw and label the Nile in blue, shade the Sahara with diagonal yellow lines, locate the Rocky Mountain range and indicate with brown triangles," leave no room for misunderstanding.

High school students will do very detailed map work and should use large-scale maps for their continent assignments (given in chapter fourteen). It's especially helpful when performing a lot of map activities to establish a format and stick to it. Let blue always represent water, mountains in purple etc. One student suggested that placing a star on the capital is too big; she uses red when labeling capitals. You may notice some atlas companies underline capital names.

Allow sufficient time for students to complete their map assignments. Please note that spellings of place names can vary from atlas to atlas. Have patience! It may take awhile to get oriented to finding the information and then figuring out where to place it on the blank map. But take heart, soon labeling will be a breeze!

Placing Your Own Grid on the Map

Sometimes it's hard to figure out where to put some features, like rivers, for example. Try placing a lightly shaded grid line on the outline, matching the grid on the reference map. Place a little tick mark on both horizontal borders of the outline map in exactly the same place they are on the reference map. Using a ruler, lightly connect corresponding tick marks. Repeat for vertical border. You should now have a grid very similar to the one on your reference map, making it much easier to figure out where to draw the city, river, or whatever on the outline. Remember, the more the map becomes filled in, the easier it becomes to properly place information required because you have increasingly more reference points.



Tip: Many people find it helpful to label bodies of water first.

A Good Teacher is ... Prepared!

When you use outlines in your lessons, it's very important to be well prepared in order for everyone to receive the best learning experience with the least amount of frustration. Be sure to have a variety of atlases available. Remember, you may go through three or four atlases before finding the one that provides what



Good teaching is 1/4th preparation and 3/4ths theatre.

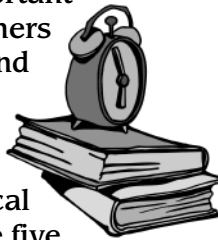
--Gail Godwin

GEOGRAPHY THROUGH LITERATURE

CHAPTER 6

TEACH GEOGRAPHY READING NOVELS

Reading aloud to students of any age is not only fun but beneficial. Listening skills improve and relationships deepen. It's an excellent way to learn about other cultures or important people without it feeling like "school." Many teachers and parents have experienced firsthand these, and many other, great advantages of reading aloud.



In this chapter you'll learn how you can incorporate the study of geography while reading historical novels. You'll develop a better understanding of the five themes in geography and watch them unfold with the story you're reading. You'll be able to develop short assignments for your students to complete that follow along with your novel. By association with the novel, students will improve retention of the information learned and gain an increased understanding of other cultures.

Before proceeding further, it's a good idea to read unit one, "Just the Basics, Please!" It is especially important to have an understanding about the five themes of geography. Chapter three will give you instructions for doing the mapping activities. This will provide the foundation necessary to gain the greatest benefit for what follows.

Historical Novels

Historical novels are an excellent way to study geography. Learn about time periods or places from the perspective of one who lived there! It's common for the first few chapters of a novel to describe in great detail the physical terrain, climate, modes of transportation and more. As the story unfolds, you'll be exposed to the community involved, the culture, their foods, holiday traditions, and their spiritual beliefs. All play a role in understanding geography's five themes.



Supplies for studying geography through literature:

- Outline map(s)
- Atlases
- World map or globe
- Markers or colored pencils
- Terms Chart (opt.)
- Timeline
- Books about the place
- “Novel Activity Sheet”

Supplies

To get the greatest benefit from this kind of study, it's best to be prepared. You'll need a blank outline map of the location of the story (preferably one for each student), an atlas that depicts the area, a world map, a globe (optional but important), colored pencils (or water-based markers if using laminated maps), geography terms chart, timeline and any books obtained from the library about the country. Books with good pictures are very helpful to students who learn visually. When selecting library books, look for those that depict the clothing, architecture, and history of the area, as well as those that include good, large-scale maps. Don't forget to reproduce the “Novel Activity Sheet” in chapter sixteen for use by your students.

Terms Chart

There is an excellent color geography terms chart that illustrates topographical features on one side and defines over 150 terms on the other. It's a really effective visual for understanding the story line when plots of geographical significance take place. It's an essential part of this study, because we're not all familiar with how some geographical features look. It's likely that if a precipice was mentioned in the story, it will also serve a purpose later. If you or your students don't know what a “precipice” is, then later it might be hard to understand how the character fell off of it! It's imperative you look up all unfamiliar geography terms. The looking-up process is quicker and easier with a colorful terms chart. You may find a good one in your the classroom atlas, in a library book about physical geography, or call one of the companies listed in the back of the book for the one mentioned above.

Student Notebook

Establish a student notebook to keep all information learned in one place. You may choose to use a stitched composition book, a three-ring binder with appropriate dividers, or a report binder. The student notebook should contain all writing projects, research notes, vocabulary words, maps, drawings and any other completed projects. Students should always use their best handwriting and keep pages free from scribbles and smudges. Students tend to do a better job when they know their work will be presented in a finished report folder. It makes a great addition to a student's portfolio and adds a certain degree of pleasure to the work accomplished. The completed notebook will be a source of pride for both the student and teacher alike. For more detailed information, read the Student Notebook section in chapter one.

Outline Maps

All historical novels provide an opportunity to use outline maps. The maps in this book can be reduced, enlarged and copied for

your own use. If the area you're reading about isn't represented by a map here, simply have your student trace one from out of an atlas or library book on blank paper. The map project should include the country, boundaries of all surrounding countries or bodies of water, and any major rivers. Other major geographical features can be drawn with symbols. A series of triangles, for example, strategically placed would indicate a mountain range; a crooked blue line a river. Everything included should be clearly and neatly labeled. This is tedious work; praise and encourage students as they progress. Students can use any symbols they see on any atlas or book, or encourage them to design their own.

Timelines

Timelines improve the understanding of historical events as they relate to other events in the world. Using a timeline, plot historical events as they're presented in your story. Feel free to record corresponding events happening in other nations or in the United States contemporary to the events of your story. What composer was living at the same time? What invention or discovery took place? What philosophers influenced the thinking of people at the time? Unit six provides detailed instructions on using timelines and timeline figures. Use the reproducible "Notebook Timeline of History" page found there.

The Novel Activity Sheet

This is a reproducible in chapter sixteen which will help provide a framework for studying the place depicted in your novel. It includes questions for which students will use an almanac, atlas, other reference materials, and the novel to answer correctly. Feel free to add your own questions or activities. This should be placed in the notebook with the outlines and timeline pages.

Additional Projects

There are many interesting projects your students can complete as you continue to read the novel aloud one or two chapters a day. You may want to limit reading to four to six chapters a week to provide enough time to do the activities suggested and to keep up with a student notebook. Remember to fit the assignment to the learning style of your students. Examples include:

- Study and draw the symbols of the country. Explain what each symbol means to the natives of the nation.
- Design a travel brochure depicting the nation's attributes.
- Write a newspaper report as though you were there.
- Use a video recorder to capture an historical flashback-type news report with a student acting as a "roving reporter." Choose an event in the story line or an historical event that occurred simultaneously.
- Study and report what life was like in the USA during the same time frame.

- Study the natural resources and plot them on the map.
- Write a journal entry daily (or weekly) from the perspective of one of the characters in the book.
- List plants and animals of this region.
- Keep a vocabulary list of new words learned.
- Purchase or prepare foods of the nation.
- Read other literature set in the place or time of your novel of choice.
- Find stamps from the country. Study what their symbols and pictures depict.
- Listen to music contemporary to the historical time period, or to what is popular to the area.
- View art from the area or of the same era.

Before Reading Aloud

Before reading the first chapter, talk about where the story takes place. Parentheses () denotes five themes.

- Using a map, let students identify the continent, the country, the latitude, and longitude of the location. Record this information on the “Novel Activity Sheet.”

- Compare this to your own (location). Discuss if the weather or climate is similar or different from your own environment (place).

- Locate the country in an atlas and again on the globe.

- Notice what bodies of water are in and near it. Name any other major physical feature of the nation (place). Add to the “Novel Activity Sheet.”

- Ask students what they currently know about the country, and how they came to know that information. What foods do they like that originate there? Are they aware of any natural resources there (relationship)?

Inspire students to pay close attention to any words that describe what the earth looks like. Challenge them to listen for geography terms which will provide clues to the physical terrain of the setting. Plan to look up all geography terms that are unclear, and keep a file card or notebook listing each new word.

Let's Get Going!

Read chapter one aloud. Consider using a file card as a book mark. When an unfamiliar geography term is spotted, jot it down on the card for use as a vocabulary word, or look it up immediately on your geography terms chart. Commend students for being good sleuths! These geography terms are now your vocabulary words for the week. Let students write a simple definition for each word using their best penmanship.



The Five Themes

1. Location
2. Characteristics of a Place
3. Relationship
4. Movement
5. Region

Follow this same procedure chapter by chapter. Watch for any of the five themes to surface. As the story unfolds, you'll begin to see modes of transportation (movement) and how people adapted their lifestyle or their surroundings to meet their needs (relationship).

Remember, you're identifying the culture, clothing, traditions, food, religious beliefs, weather, plants, animals; any characteristic of the people or the place directly related to the setting. Watch and see how often the plot is intertwined with geography-related subjects.

Students who learn best by doing can draw a picture of the description. Students may perform further research on any subject of particular interest that the story inspires. Many, many historical novels provide perfect opportunities to draw maps of the main character's neighborhood, journey, or of the main street. Students can draw the clothing, coins, flag, architecture; anything that distinguishes this place as special (region, place).

Great Books to Read Aloud

Since historical novels and stories with journeys help teach differences of climate and living conditions, show movement, and demonstrate physical and human characteristics, a few suggestions are provided below. Approximate grade levels and, if appropriate, study topics are given in parentheses after the author's name. These grade levels are arbitrary and can stretch in either direction. It's always a good idea to preview suggested books to determine appropriateness for your students.

Recommended Reading

- Make Way for Ducklings* by Robert McCloskey (K-2)
- Winnie the Pooh* by A.A. Milne (K-4)
- Heidi* by Johanna Spyri (all grades; Swiss Alps/Austria)
- The Bronze Bow* by Elizabeth George Speare (K-8; Israel)
- Robinson Crusoe* by Daniel Defoe (all grades; botany and survival skills)
- Little House on the Prairie* series by Laura Ingalls Wilder (3-7, Frontier America)
- Little Britches* series by Ralph Moody (all grades, early 20th century Colorado)
- Journey to the Center of the Earth* by Jules Verne (6-10, Iceland/Europe-geology)
- Kidnapped* by Robert Louis Stevenson (6-10, Scotland)
- The White Stag* by Kate Seredy (all grades; migration of Huns and Magyars to Europe)
- Trumpeter of Krakow* by Eric P. Kelly (6-10, 15th century Poland)
- Hans Brinker or the Silver Skates* by Mary Mapes Dodge (5-8, 19th century Holland)

GEOGRAPHY THROUGH SCIENCE

CHAPTER 8

INCORPORATE GEOGRAPHY INTO SCIENCE STUDIES



Although we tend to think of geography and history as the "perfect couple," geography and science go hand-in-hand as well. Earth Science is practically a detailed course in physical geography. The easiest ways to incorporate geography into your science program are to:

- Recognize when the topic you're teaching is also a geographic concept. (Watch especially in life and physical sciences.)
- Use an interdisciplinary approach when possible. For example - if studying the break-up of the Soviet Union, learn the political and physical boundaries, the environmental effect of Chernobyl, and the pollution problems faced by many former Eastern Bloc countries.
- Use maps as they relate to your science topics.

This chapter includes map ideas, lists of ways to correlate weather and geography, and a teaching unit on volcanoes.

Maps and Science

Not only are maps a visual representation of information presented, they also serve as a reminder that the topic being studied has a correlation to geography. For example:

- Ecosystems and habitats - color code the areas in the world that share that habitat. Write in samples of animals or kinds of plants that live there. Make a key.
- Migratory patterns of birds make interesting maps. Seeing it visually leads to further areas of discovery.



The Scientist's Apprentice is one curriculum that uses this approach. See Resources.

- Chart weather on the map. Whether it's local or world, students should learn how to interpret various types of weather maps. Chart hurricanes during hurricane season.
- Include maps when studying oceanography. Show and discuss navigation charts used by boaters and maps of the ocean floor. How did we get that information? How are they different/similar to land maps? Use topographical maps for geology, ecology, and habitat studies.
- Maps for the solar system help us visualize where Earth is in relation to the other planets. It's easier to memorize planet order after seeing the information, instead of just reading about it.

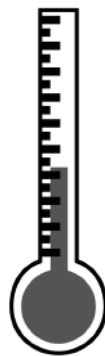
Other topics that lend themselves to map use:

- | | |
|---|------------------|
| Earthquakes and volcanoes | Land forms |
| Natural resources | Geology |
| Water cycle | Climatic regions |
| Rock formation and weathering | Food supply |
| Chart mineral deposits | Plate tectonics |
| Ecology, pollution, and the environment | |

Weather: Working up a Storm!

Geography and weather are intricately intertwined. Weather makes a fascinating unit with many opportunities for hands-on projects. Use the reproducible weather tracking chart, "Weather Report." Laminate and use a Vis-a-Vis pen for write-on/wipe-off use. It's great for helping students pay closer attention to weather and to signs of changing weather. (While making photocopies, don't forget the "Temperature Graph." Also, use the upper-level "Working Up a Storm" reproducible to challenge older students or as a research tool.) These reproducibles can be found in chapter sixteen.

Use these ideas and questions to put together a great weather unit!



- How does weather impact our lives?
- How do we find out about our weather forecast? What did our grandparents do before TV and the Weather Channel?
- Some people are very good at forecasting weather without using available technology. Why is that still important?
- Are there occupations today that still benefit from the ability to closely determine the weather?
- Interview someone who is knowledgeable about weather predictions. How did they learn to forecast? What information/clues do they use to determine the weather? How is that helpful to them in their everyday lives? (Try boaters, farmers, pilots, and anyone else who works or plays outside.)

GEOGRAPHY THROUGH HISTORY

CHAPTER 10

WHAT MAPS DO I USE WHEN STUDYING...?

History is such an absorbing subject! The people, the customs, and all the things that happen in a particular place or era can be absolutely engrossing. But, when we're caught up in the story we don't always think about the ways in which maps can present information in a visually memorable manner. Most teachers use at least some maps in their history studies. Here we give you much more than the same old thing: we give you ways to dramatically improve student retention and understanding through creative map work. Try it and see the difference!

Studying United States history? Whether using a textbook, resource package, or creating your own unit study, this chapter provides a strong framework in which to work. We've broken U.S. history down into time periods, we provide guidelines for which maps to use when, and we suggest ways in which to use them. We even provide the maps you need. You'll find them in chapter fifteen.

Choose activities based on your students' ages and abilities. Not studying U.S. History? No problem, the ideas here can be transferred to whatever you're currently studying in history.

Planning Your Lesson

When planning your lesson, check out the appropriate section, copy the necessary reproducible outline maps, and integrate them into the course work. Here are several ways to do so:

- 1) Before introducing the place or time you're studying, have students get their maps and together label major items of interest. This will help them visualize the information you're soon going to be giving them.

- 2) After introducing the concept, have students color in the appropriate information. This is particularly useful in order for them to "see" what you've just told them.
- 3) Invite students to show the information they've learned by creating a map "storyboard." This could be as simple as having them draw and label the original thirteen colonies, or as complex as a series of maps showing how the United States developed from the original settlers to the acquisition of all fifty states.
- 4) Maps can be an integral part of both reports and posters. Encourage their usage and show samples to get them thinking.
- 5) Summarize lessons by holding up large maps and reviewing pertinent information.
- 6) Assign map work for homework. (Make sure students have access to appropriate atlases or reference material.) It's a nice change from typical homework and it gives the artistic, left-brain thinker a chance to do homework creatively.

U. S. Historical Time Periods

There are many different ways to distinguish historical time periods. We've divided the U.S. history assignments into the following time periods:

- Exploration
- Colonization
- Birth of a Nation
- Civil War and Reconstruction Era
- 20th Century

Feel free to adjust these periods to coincide with your own U.S. history curriculum. You may want to check off the boxes as your students complete each map activity. This is especially helpful to track if you're not covering these events in chronological order.

Most of the map work is laid out so that you can copy them as hand-outs for your students. You may want to copy them for your own record keeping. Since it's impossible to cover everything in U.S. history here in this chapter, we've selected what we felt was most important. Go ahead and add any other events you deem necessary.

UNITED STATES HISTORY: EXPLORATION

Explorations Before the Great Age of Discovery

Maps: World
North America

Explorers: Vikings (especially Lief the Lucky)
Marco Polo
Prince Henry the Navigator

Explorations from 1490-1530

Maps: World
Western Hemisphere
North America

Explorers: Columbus
Cabot
Vespucci
Ponce de Leon
Balboa

Magellan
Verrazano
Dias
De Gama

Explorations from 1530-1610

Maps: World
North America

Explorers: Cartier
De Soto
Coronado
Drake

Raleigh
Hudson
Champlain

Using Maps for Exploration:

Begin with the World Outline Map, then move to close-up maps.

- Color code the explorers.
- Color code the nations they explored for.
- Draw a picture of the country's flag and put it in the key.
- Add dates and number of voyages as appropriate.
- Make symbols for what the countries sending explorers were looking for and paste them to the country or add to the key.
- What was their mission? Were they successful?
- Color code routes and places claimed.
- Make a boat for each explorer.
- Label New World and Old World.
- Label the continents.
- Label the oceans.
- Label the major lakes as pertinent to your study.