



**Gundalow**  
**COMPANY**

Protecting the Piscataqua region's  
maritime heritage and environment  
through education and action

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## Piscataqua People: At Home Edition!

### Instructions:

This activity allows us to learn about the history of the Piscataqua region, the people who lived there, and their environmental impact. You will construct a map and then pretend to be one (or more) of the groups of people who used this land and its waterways. This can be played by one person or multiple people. If you have multiple people, each person can choose a different group of “Piscataqua people” to play, such as Settlers, Merchants, or Native Americans.

### For this activity, you will need:

- Scissors
- Glue
- Drawing paper
- Pencil, marker, crayons or other drawing tools
- You may need to look up some of the vocabulary words in order to have a reference photo to help you draw

## Constructing the Map:

First, we need to construct a map of the land around the Piscataqua River. There is a complete map for reference on page 23, and pages 24-27 are pieces that need to be cut out and glued together. Then we will label the land and water and think about where we are in the region.

1. Cut out map pieces.
2. Glue them together based on the reference map.
3. Without looking at the reference map: Which areas do you think are water? Which areas are land? (Hint, the map shows the Atlantic Coast, so the water will be to the East of the land)
4. Label or color the water and land.
5. Can you label the main rivers? Can you find the Great Bay? What about the towns in this area? Write these names these on the map.
6. Can you figure out where your house is on the map?

Now that you have your map, we must go back in time. We're going back 400 years to the arrival of the first English settlers on this new land. You've just been on a ship at sea for months and then you come to the coast of this map, arriving just at the mouth of the Piscataqua River.

### Questions:

- What might you see on the land?
- What would you see in the water?
- Are there any people here?
- How would you travel?
- What do you need to live in this new place?

## People of the Piscataqua Region:

Now you get to choose a group of people from the Piscataqua region that you want to pretend to be. Don't worry, you can always go back and choose another one! Each section includes background information about these people, some vocabulary words, resources you already have, and questions to think about as you choose a place to settle.

Choose one of the groups of people listed below and skip to the page with their information. After reading about your people, come back and follow the directions below.

**Native American** – page 14

**Settler** – page 6

**Lumbermen** – page 17

**Shipbuilder** – page 9

**Merchant** – page 20

**Industrialist** – page 11

Once you choose your group of people (Native Americans, Settlers, etc.), you'll be choosing a place to live on the map and thinking about the resources you'd need around you.

1. Draw a house on a piece of paper- do your best to think about what kind of house this would be based on your group of people. Sometimes this will be part of your vocabulary.
  - a. For example, if you're a Native American, you might build a wigwam. If you're a settler, you might build a brick house using the clay from the riverbed.
2. Draw some of the resources you have (listed on the information sheets), such as straw, livestock, timber, or a sawmill.
3. Cut out the house and the resources and place them on the map where you would want to live. Don't glue them yet!
4. Step back from the map and answer the questions below.

**Questions:**

- Do you have access to water? How would you use the water?
  - Can you travel to reach other people for trading and building?
  - Do you have what you need around you? For example:
    - **Shipbuilder**- do you have lumber close by and a place to build your ship by the water so that it doesn't have to be carried by land?
    - **Native American**- do you have enough land now that the settlers have arrived? Do you have water access to fish and farm?
    - **Settlers**- you need to make a lot of things on your own to survive. Does your livestock have enough space? Are you close to a river for traveling and for clay?
    - **Lumbermen**- are you located near a forest for your lumber supply? Do you have a river to dam to power your sawmill?
    - **Merchants**- are you in a place where ships from the ocean can drop off their cargo onto a gundalow? Can the settlers around you get to your trading post?
    - **Industrialists**- you need workers for your factory. Are you nearby any other people? How would they get to you? Have you found a river to dam to power your factory?
5. If you want to move your house or mill, go ahead. Then glue it down onto the map.

**Additional Activity:**

- What materials in or around your house could you use as resources? These could be things like wood, yarn, beans, or other items that are not electronic and could be made or used by your people at that time. Gather 1 item from your house and think about how you might use it.
- Now imagine that winter is coming- what would you do to prepare yourself for winter? You might need to grow and store more food or build onto your house.

**Trading:**

You might have noticed that you need some more things than you have in order to survive. If you're playing with other people, trade resources with them to get what you need. If you're playing by yourself, see if you can go to the "merchant" (any adult present) and barter (trade) an item with them to get something in the house that you need. You cannot steal things! Both people involved must agree to the trade.

**Reflection:**

- How did the trading go? Was it difficult to get what you needed, or did you make good trades and relationships with the other people in the region?
- Do you think you would like to live 400-200 years ago? How was it different from today?
- Did you change the landscape of the map? How did you impact the environment in your region?

## **PISCATAQUA PEOPLE**

### **Settlers**

When the first European explorers returned home from exploring the northeast coast of North America, they told stories of the many things they found: plenty of fish, furbearing animals, and great forests. As word spread, people came by ship to settle in the newly discovered land. They found the fish, forests of trees, and fertile land for farming. They traded with Native Americans and farmed the land. The river became their highway.

Life was difficult for the settlers in the beginning. They cleared land, planted crops and built houses. They used the rivers for transportation and as a source of energy and food. They decided what crops to grow, where to build their homes and how to get along with the Native Americans.

Kittery was the first permanent settlement on the Maine side of the Piscataqua River, followed by Eliot and the Berwicks. On the opposite side of the river, Strawberry Banke was settled (Portsmouth), along with the towns of Dover, Durham, Exeter and Hampton, all along a tributary of the Piscataqua River. The rivers became highways that were used for trade and the settlers built a special boat called a gundalow. With a flat bottom and a shallow draft, gundalows could be used in shallow water and tidal rivers where boats with full keels might get stuck. Settlers dug clay from the river banks to make bricks, and used the bricks to build houses and factories.

### **Things to think about**

1. Why would it be good to build your house near a river?
2. What kind of animals do you think the settlers raised?
3. How could the Native Americans be helpful to the settlers?

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## VOCABULARY

BRICK HOUSE	SAWMILL
CROPS	SETTLER
ENERGY	SHALLOW
ESTUARY	SHIPYARD
FACTORY	TRADE
FLAX	LIVESTOCK
GUNDALOW	

## Settlers Vocabulary

<b>Bricks:</b>	Bricks are made from clay that has been
<b>Crops</b>	Plants raised by farmers primarily for food
<b>Energy:</b>	The ability to do work. Food gives us the energy to do work. Water turns a waterwheel to provide energy to run a sawmill.
<b>Factory</b>	A building constructed by an Industrialist for the purpose of making manufactured goods like shoes, cloth, and paper
<b>Flax:</b>	A plant that produces fibers that can be spun into yarn that is woven to make linen cloth,
<b>Great Bay Estuary</b>	A large body of fresh water that empties into the Piscataqua River. The Oyster, Lamprey, Winnicut, and Bellamy Rivers are tributaries of the Great Bay Estuary.
<b>Gundalow</b>	A special flat bottom sail boat built by early settlers to carry cargo in the shallow waters of the Piscataqua Region.
<b>Piscataqua Region</b>	The land, including all the towns, surrounding the Piscataqua River and its tributaries.
<b>Sawmill</b>	A place where trees are cut into lumber using a large saw powered by a waterwheel

<b>Shallow</b>	Shallow water is water that is not very deep. Often not deep enough to float a boat.
<b>Shipyard</b>	A place very close to water where ships are built.
<b>Trade</b>	To exchange one thing for another. For example to trade basket of corn for a pair of shoes.
<b>Tributary</b>	A stream or small river that empties into a larger river.

**Part 1: Questions to think about, as you place your house and resources on the map.**

1. Look at the map and choose a place for your house. Think about land for farming. Would it be important to be near a river?
  2. To farm, you would need fertile soil and large fields for planting crops. You'd need to be near water if you want to fish. If you plan to make brick you need to find clay. How would you transport your crops, fish or bricks to a place where people could buy them?
  3. Place the pictures of the crops and animals you raise on your map. What would be the best place for each thing? What will you make or catch that you could trade?
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## Shipbuilders

People coming to the Piscataqua Region saw a wide, deep, swiftly flowing river with a protected harbor at its mouth. They saw forests filled with large trees that could be sawed into lumber to build houses and ships. So many people began building ships and houses that the forests began to disappear.

Some of the white pines were so large that the King of England made a law declaring that all trees three feet thick or more at the base could only be cut for masts for his ships.

Lumbermen cut down trees and floated them to sawmills along the rivers. Gundalows and wagons took the lumber to shipyards. The shipbuilders launched their ships and traded with the settlers for shingles, bricks, potatoes, and fish to load their ships. They returned from their voyages with products people in the Piscataqua Region were unable to grow or make, such as tea, coffee, sugar, cotton, and molasses.

Building ships is a complicated business that required many workers. Shipbuilders needed carpenters, blacksmiths, sailmakers, ropemakers and painters. The towns grew larger as these workers and their families settled in the region.

The Piscataqua became a very busy port with ships from all over the worlds coming and going with valuable cargos.

## Things to think about

1. Where would be the best place be to build your shipyard?
  2. Who would work in your shipyard?
  3. What skills would your workers need to know to work in your shipyard?
  4. What else could you use lumber for besides building ships and houses?
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**VOCABULARY**

GOODS

SCHOONER

GUNDALOW

SLOOP

LUMBER

VOYAGE

MAST

WAYS

MOLASSES

WHARF

**Shipbuilders' Activities****Part 1: Put Your Items on the Map**

1. Look at the map and choose a good place for your shipyard. You need flat land near a river so the ships can be launched when they are finished.
  2. Shipbuilders used hundreds of feet of lumber for each ship. Place the picture of men cutting down trees on the map to show where trees were cut to build ships.
  3. Ships were launched by sliding them in the water down large, greased timbers called "ways" (they look like railroad tracks). Place the ways on the map where you decide to build your shipyard. Place the unfinished ship on the ways.
  4. Place your wharf at the edge of the river where you plan keep your ship. Place your finished ship on the river beside your wharf, ready to sail to the West Indies. Put masts in the ship to show it uses sails.
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## Industrialists

For many years people in the Piscataqua Region made shoes, furniture, cloth, hats and clothing. If a person wanted a pair of shoes they'd go to the shoemaker, who would make a pair. The person needing the shoes would trade something for the shoes.

Later, people invented machines that made shoes. They also invented machines that made cloth, paper, and other products. The machines did all the work and people only had to make sure the machines worked properly.

Industrialists built large buildings called "factories", filled with machines run by waterpower. Soon there were factories making cloth, paper, shoes and other manufactured goods (things that had be made, not grown) that merchants sold in their stores.

Industrialists built dams across the rivers, using the water to turn waterwheels that made the machines in the factory work. Later they used coal to heat water in order to make steam that would run the machines. The smoke from the burning coal polluted the air.

The factories needed people to make sure the machines worked properly. The factory owner paid people who once had been farmers, or who worked at home, to work in the factories. Young men, women and even children worked in factories.

Waste from factories was dumped into the rivers, polluting the water. Pollution increased as Industrialists built more and more factories, and some river even smelled badly.

### Things to Think About:

1. People used to put their garbage into the rivers to get rid of it. Where did all the waste go?
  2. Do people dump trash in our rivers today?
  3. What can we do to stop pollution?
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### VOCABULARY

FACTORY

MERCHANT

GOODS

POLLUTION

GUNDALOW

POLLUTED

INDUSTRIALIST

TRADE

MANUFACTURED GOODS

WASTE

### Part 1: Put your items on the map

1. Look at the map and choose a place for your factory. What would be the best place? Would it be important to be near the river?
2. As Industrialists, you need workers to run your machines. Would they come from the Piscataqua Region or other countries? How would you pay them?
3. How would you get your finished good to places where people could buy them?
4. Place pictures of your finished goods on the map. Where would be the best place for them?
5. Will you sell your goods to people in the Piscataqua Region or in other places?

### Industrialist's Vocabulary

<b>Factory:</b>	A large building where manufactured goods are made.
<b>Goods:</b>	Things made in factories or by individuals for sale or exhibit: shoes, bricks, clothing, etc.
<b>Industrialist:</b>	A person who owns a building for making manufactured goods.
<b>Manufactured Goods:</b>	Goods that have been made in a factory, not grown in a field.
<b>Pollution:</b>	Adding materials to air, water or soil that are harmful. Smoke, oil, and trash are examples of things that cause pollution.
<b>Polluted:</b>	Water and air are polluted when they contain waste products from factories and other sources that can harm humans, animals, and plants.
<b>Trade:</b>	To exchange one thing for another: "I'll trade you my apple for your candy bar."
<b>Waste:</b>	Anything that is disposed of or not needed: smoke, plastic plates, chemicals, etc.

## **Native Americans**

You have been in this region for over 6000 years. You Abenakis occupy the central coastal region of what the English called New England. You have developed an advanced culture - making weapons, tools, fishing gear, boats, homes and clothing from materials such as stone, wood, bone, and animal hide. You have become experts at farming, fishing, trapping, and hunting. You travel the rivers and to off-shore islands easily in lightweight, fast canoes made with bent wood frames and birch bark hulls.

You live close to the land and understand the water, fish and other animals that you depend on. You clear out forest undergrowth for easier running and hunting, build nets in the narrows of the river to catch fish, and move with the seasons; in winter, inland for hunting, trapping, and firewood; in summer, close to the fishing areas, oyster beds, and clam flats where you can also tend your gardens.

In bad times you must defend yourselves against the northern Mic Macs who do not farm but raid your villages for food. Recently your numbers have been greatly reduced by a new sickness. The white men first came temporarily to fish from the offshore islands. Now they have begun to settle permanently on the mainland, sometimes bringing their families and even strange animals to live with them.

### **Things to think about**

1. What kind of activities would you be likely to do in each season?
  2. Without horses, how could you easily move from site to site?
  3. Should you teach the white settlers how to grow local crops?
  4. What could you trade them for their wonderful iron pots and tools?
  5. Would you ever get angry at the white settlers and try to drive them out?
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## VOCABULARY

CANOE

RAWHIDE

DUGOUT

SNARE TRAP

FLINT

WIGWAM

LONGHOUSE

PELTS

### Part 1: Put your items on the map

1. Look at the map and choose a place for your summer campsite.
  2. Place your fish weir in a narrow part of the river that will catch some fish (but not all of the fish).
  3. Place the clam and oyster pictures where you might find them (clam flats at low tide and oyster beds in shallow water).
  4. Place your winter campsite further north for better hunting.
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### Native American Vocabulary

**Flint**            Hard stone chipped to make arrowheads, axes, knives, and other cutting tools.

**Dugout**        Simple heavy boat made from a dug-out log.

**Canoe**            A light and fast boat made from birch bark attached to bent wood frames.

- Rawhide** Thin strips of cured hide used for sewing canoes, clothing, and as rope.
- Snare trap** A spring trap made from a vine loop and bent willow tree
- Wigwam** Light, portable, house used for short-term settlements
- Longhouse** Sturdy winter house for a large group with a fire inside
- Pelts** Skins of beaver, raccoon, bear, and deer which make fine, warm clothing



## Lumbermen

Your bosses in England wanted gold, but you found something even more valuable: vast forests of tall pines, mighty oaks, beautiful birch trees, and many other species of trees in size and numbers that had not been seen in Europe for a thousand years,

Almost everything in your world is made from wood: ships, masts, houses, furniture, tools, weapons, windmills, water wheels, and more. Just about everything else is made from other plants, animal parts, and small amounts of iron and bronze. Only stone and brick are used in similar quantities, but they're not nearly as useful.

Your job is to make money for your bosses. You need to identify the tallest and straightest pines as masts for the ships of the King's Navy. You can cut trees closest to the rivers and "raft" them down to the port for export. Later you'll need to make trails to pull trees from the interior to the rivers. If you build sawmills on the rivers, the finished lumber will be easier to export than whole logs. You can begin to sell it for local use and to other colonies, using a flat-bottomed gundalow to transport lumber through the region. Cordwood can be sold in 4 foot lengths for use in fireplaces, stoves, and brick kilns.

### Things to think about

1. How would you keep others from cutting the King's mast trees?
  2. What will you do with the unwanted sawdust from your mills?
  3. How will you move the finished lumber without getting it wet?
  4. How will you power your sawmills?
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## VOCABULARY

BIRCH	LOG RAFT
BOARD	OAK
BOARD FOOT	PINE
CLAPBOARD	PLANK
CORD	POST & BEAM
GUNDALOW	

### Part 1: Put your items on the map

1. Look at the map to see how you could easily get to the forested areas along the rivers.
2. Where is the first stand of trees you will cut?
3. Locate a good place for your first sawmill
4. Lay out trails to drag trees to the closest river
5. Collect your logs to raft them down river

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### Lumbermen Vocabulary

**Pine:** Tall straight trees – soft wood easy to cut and shape

**Oak:** Hard, strong, heavy trees – good for strong frames and Ship building – also for cordwood

<b>Maple:</b>	Beautiful hard wood for furniture or cordwood
<b>Birch:</b>	Light, clear, soft and flexible for furniture and small boats
<b>Log Raft:</b>	Mass of logs tied together for floating down river
<b>Post &amp; Beam:</b>	Large square sawn logs for framing barns and houses
<b>Board:</b>	Logs sawn into flat boards for walls, floors, and roofs
<b>Plank:</b>	Thick boards for heavy use like ships, ramps, and barn floors
<b>Clapboard:</b>	Thin tapered board used for house siding
<b>Board Foot:</b>	A measurement of lumber 1 foot by 1 foot and 1 inch thick
<b>Cord:</b>	A measurement of firewood stacked 4 feet X 4 feet X 8 feet

## Merchants

You are a healer and an expert on herbal medicines, which you have brought with you to transplant in the New World. Your husband is a skilled trader and experienced merchant who has many goods to trade. You will need to establish a home, a store, and an herb garden, plus a warehouse and dock for both gundalows and ocean-going ships.

Eventually you hope to create a two or three-way trade with the local area, other colonies further south, the Caribbean, and Europe. You want your growing medical practice to be close to the greatest number of people.

As people continue to settle in the Piscataqua Region, the demand for goods increases. As a merchant you want to build your business and provide what the local people need.

Some families built warehouses where they could store goods before they were loaded onto ships and sailed to far-away ports like the West Indies. When ships returned from their voyages with cotton, sugar and molasses, these were also stored in the warehouses. Merchants visited the warehouses to buy or trade for things to sell in their stores.

### Things to think about:

1. What would be the best place to establish your store and garden?
  2. Where would you put a warehouse and dock?
  3. What products can you find that can be easily sold elsewhere at a profit?
  4. Who will you get these products from?
  5. How will you transport them?
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## VOCABULARY

ACCOUNTS

LEDGER

CAPITAL

MERCHANT

CREDIT

MERCHANDISE

CLERK

WAREHOUSE

GUNDALOW

### Part 1: Put your items on the map

1. Choose a place for your shop that is likely to become a large settlement, close to water
2. Find a sheltered, deep-water location for a dock.
3. Locate your warehouse as close as possible to the dock.
4. Think about what others are producing that you could buy or trade for.

### Merchant Vocabulary

**Credit**                      selling goods on account to be paid for later

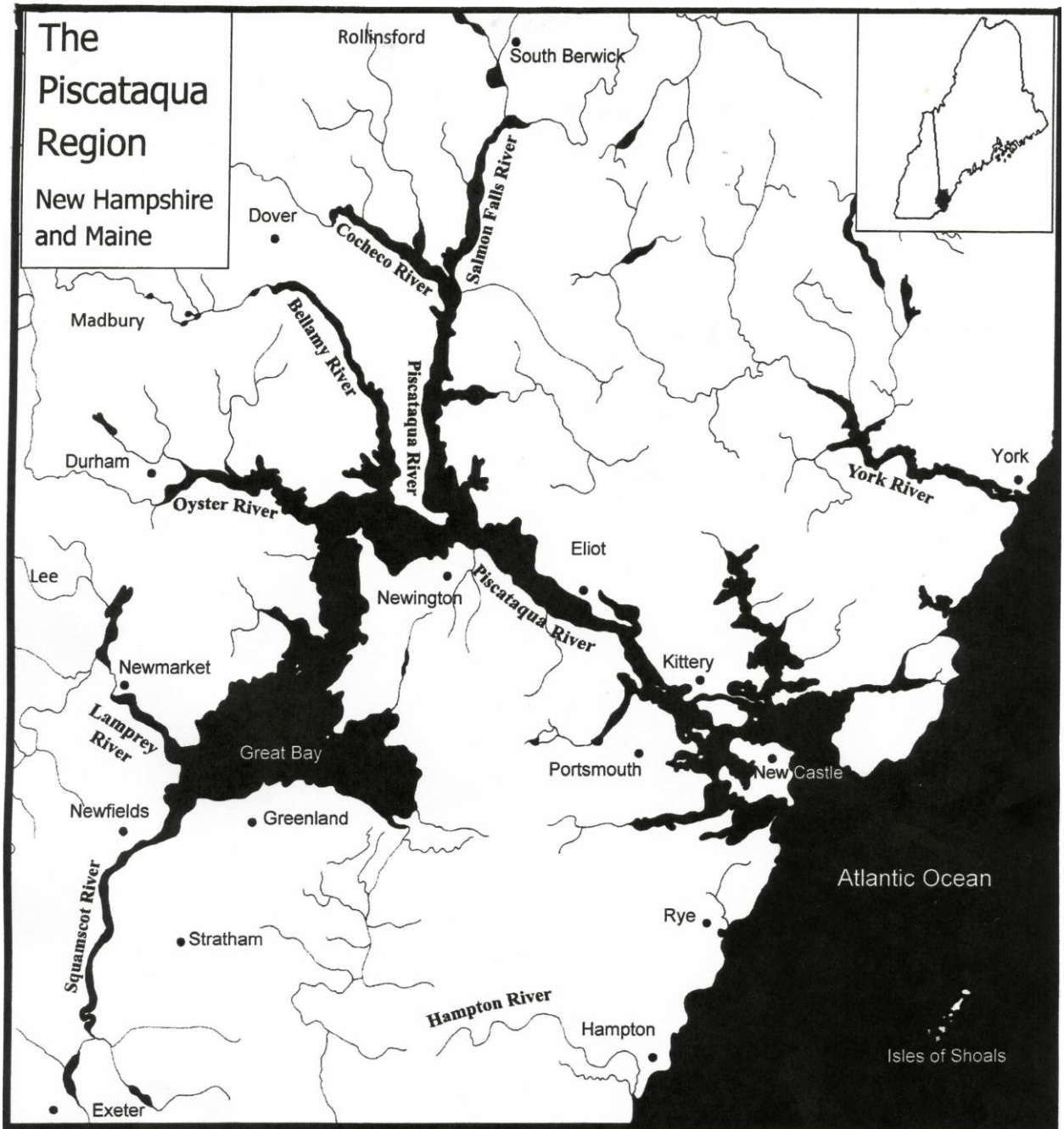
**Accounts**                      detailed records of everything bought, sold, and owed

**Leger**                              large book in which every account is hand written

**Merchandise**                      any items that are sold or traded

<b>Capital</b>	total of all merchandise, money, livestock, and any other belongings you have
<b>Clerk's desk</b>	small flip-top desk used while standing up to write down transactions and to store ledger and other papers

### Reference Map



Map Pieces to Cut Out

